Architecture

Introduction

The Architecture Study Program at BINUS UNIVERSITY has taken the steps to design the curriculum in order to anticipate the developments of information technology in the global era and to fulfill market demand.

The subjects of the core curriculum are based on several competencies such as: Personal Development, Science and Skills, Working Expertise, Working Behavior, and Community Involvement. The required minimum credits that have to be taken are 146 credits. This curriculum will allow the opportunity to increase the knowledge and technology in architecture, to provide knowledge for those who want to be an entrepreneur in architectural work, and to pursue professional education or further studies in the master program (S2) and doctorate program (S3).

The Architecture Study Program focuses on delivering graduates of architecture who are ready to work, and are innovative since they are comprehensively educated with an integrated environmental concept and strong cultural values. Furthermore, mastery in information technology becomes a value-added as a graduate of Architecture of BINUS UNIVERSITY.

Vision

To become a world class architecture department in continuous pursuit of innovation and enterprise based on IT.

Mission

The mission of Architecture Department is to contribute to the global community through the provision of worldclass education by:

- 1. Educating students through cases on building environment, highlighting professional services and entrepreneurial skills;
- 2. Educating students in ICT based on creative and innovative design skills that help to improve the quality of life:
- 3. Conducting research and improving student's research experience in sustainable building environment and local values.

Program Objective

The objectives of the program are:

- 1. To provide students with the ability to produce an integrated building environment design using creative, innovative and ICT based solutions that help to improve quality of life;
- 2. To conduct research that focuses on sustainable building environment and local values;
- 3. To prepare students with knowledge of the professional ethics of an Architectural Entrepreneur.

Student Outcomes

After completing the study, graduates are:

- 1. Able to develop a design concept that integrates research; which in particular are human behavior, environment, technical aspect and local values; with architectural design;
- Able to design architectural works independently with research-based methods, and produce a creative architectural design which the solution on the contextual culture problem and which has been analysed based on the principles of architectural design;

- 3. Able to communicate their ideas and design in the form at graphics, narration and model comprehensively both in manual and digital techniques based on information and communication technology (ICT);
- 4. Able to demonstrate ethical and aesthetic, adaptive and appreciative behaviours;
- 5. Able to prepare entrepreneurship concept in a creative field;
- 6. Able to apply interdisciplinary knowledge and skills in developing alternative solutions for problem-solving.

Prospective Career of the Graduates

The graduate of the Architecture Study Program will have sufficient knowledge of Planning, Programming, and Designing, Building Technology, Project Management, Property Management, Interior Design and Mastery of Information Technology.

Therefore, the graduate of Architecture has the choice of a wide range of professions that include:

1. Consultancy : Architect

Construction : Engineer, Contractor
 Construction Management : Construction Manager
 Banking : Credit Analyst (Appraisal)

5. Property : Building Manager, Marketing, Real Estate Manager

6. Interior : Interior Designer

7. Development : Planner, Urban Designer, Developer

8. Information Technology : 3D Animator9. Research : Researcher

10. Media (Printed or Electronic media) : Architecture Journalist, Writer, Editor

11. Independent Business : Freelance Architect12. Education : Lecturer and Instructor

Curriculum

Famous for its reputation in Information Technology, BINUS UNIVERSITY has developed its expertise in the field of architecture that has orientation in computing or ICT either in design processing or in building operations. Architecture Study Program of BINUS UNIVERSITY updates with the development of information technology in architecture as today, the industry requires employees to have mastery in information technology. Based on these qualifications, the Architecture Study Program focused on the implementation of information of technology in the architectural design as the core competency in which this core competency has to be mastered by every student. The curriculum also has enrichment program such as internship and industrial experience for each student. The curriculum is based on both the National Curriculum and Architecture Study Program Association. Additionally, in order to fulfill the requirement of housing facility and sustainable development, the Architecture Study Program at BINUS UNIVERSITY also include "sustainable human settlement" as a part of its curriculum. All of the curricula are supported by MCL (Multi Channel Learning) system namely BINUS Maya. It assists the students in the learning activity so that the students are able to study systematically integrated with BINUS Maya.

Elective Group

The objective of this group is to provide the students with the insight knowledge and skills required by business and industry. The materials for this group will always be updated in accordance with the latest market demands so that graduates are ready to participate in and face the competition of the job market. The elective group contains three concentration subjects.

Concentration Subject:

1. Architectural Streaming

All subjects of Architecture are distributed in 8 semesters. The concentration subjects (stream) are opened in the 4th Semester to 8th Semester.

Course Structure

Sem	Code	Course Name	SCU	Total
	CHAR6013	Character Building: Pancasila	2	
	ARCH6001	Introduction to Architecture	2	
	ARCH6018	Building Technology I	4	
	ARCH6042	Architectural Design I***	4	
	ARCH6120	Design Thinking I	2	00
1	ARCH6121	Architectural History*	2	20
	ARCH6122	Computational Architecture*	2	
	English Univ	ersity Courses I	·	
	ENGL6128	English in Focus	2	
	ENGL6130	English for Business Presentation	2	
	CHAR6014	Character Building: Kewarganegaraan	2	
	ARCH6019	Building Technology II*	4	
	ARCH6043	Architectural Design II*&**	4	
	ARCH6123	Design Thinking II*&**	2	
2	ARCH6003	Building Physics*	2	20
2	ARCH6004	City and Settlement*	2	20
	ENTR6509	Entrepreneurship: Ideation	2	
	English Univ	ersity Courses II		
	ENGL6129	English Savvy	2	
	ENGL6131	English for Written Business Communication	2	
	CHAR6015	Character Building: Agama	2	
	ARCH6020	Building Technology III*	4	
	ARCH6044	Architectural Design III*8**	4	
3	ARCH6124	Design Thinking III*	2	18
	ARCH6139	Site Planning*&**	2	
	ENTR6510	Entrepreneurship: Prototyping	2	
	LANG6027	Indonesian	2	
	ARCH6021	Building Technology IV*	4	
	ARCH6045	Architectural Design IV*&**	6	
4	ARCH6125	Design Thinking IV*&**	2	
	ENTR6511	Entrepreneurship: Market Validation	2	
	Streaming: A	rchitectural Streaming		22
	ARCH6051	Urban Architecture*	2	
	ARCH6054	Interior Design Principles**	2	
	ARCH6059	Building Material Knowledge*	2	
	ARCH6134	Digital Construction*&**	2	

Sem	Code	Course Name	SCU	Total
	Minor Progra	am	8	
	Free Elective	es	8	
	ARCH6006	Seminar	2	
	ARCH6046	Architectural Design V*&**	6	
	Streaming: A	Architectural Streaming		
	ARCH6047	Behavior in Architecture	2	
	ARCH6061	Sustainable Architecture*&**	2	
	ARCH6076	Project Management	2	
	ARCH6090	Architectural Geometry Design*8**	2	
	Architectura	I Elective Course (4 SCU):		
	ARCH6127	Property Assessment	4	
5	ARCH6128	Multimedia in Design Presentation	4	20
	ARCH6129	Urban Housing	4	
	ARCH6130	Architecture & Social Culture	4	
	ARCH6131	Architectural Conservation	4	
	ARCH6132	Leadership Organization Behavior	4	
	ARCH6133	Building Information Modelling Project	4	
	ARCH6135	Acoustics and Lighting Design*	4	
	ARCH6136	Tropical Architecture**	4	
	Minor Progra	am	12	
	Free Elective	es ·	12	
6	Enrichment	Program I	20	20
7	Enrichment	Program II	20	20
8	ARCH6137	Final Project	6	6
			TOTAL C	REDIT 146 SC

^{*)} This course is delivered in English

Streaming/Minor/Free Electives:

- -) For 4th Semester: Students are required to choose streaming or minor program or free electives.
- -) For 5th Semester: Students are required to choose streaming or minor program or free electives same with semester 4.

English University Courses:

- -) For 1st Semester: English University Courses I, students with Binus University English Proficiency Test score less than 500 will take English in Focus, and student with test score greater than or equal to 500 will take English for Business Presentation.
- -) For 2nd Semester: English University Courses II, students with Binus University English Proficiency Test score less than 500 will take English Savvy, and students with test score greater than or equal to 500 will take English for Written Business Communication.
- -) Students must pass English Savvy with a minimum Grade of C.

^{**)} Global Learning System Course

Minor Scheme

Minor Program	Semester 4	Semester 5			
Minor @ Binus Kemanggisan					
Digital Ecosystem	V	V			
Human Capital in Digital Workplace	V	V			
Sustainable Development	V	V			
Cross Cultural Communication	V	V			
Interactive & Users Experience Design	V	V			
Minor @ Binus Alam Sutera					
Digital Business	V	V			
Minor @ Binus Bekasi					
Virtual Services	V	V			
Culinary	V	V			
Minor @ Binus Malang					
Digital Technopreneur					
Minor @ Binus Bandung	Minor @ Binus Bandung				
DesignPreneur	-	-			

1. Minor Program: Digital Ecosystem

	Course	SCU
COMP6683	Introduction to Artificial Intelligence	2/2
COMM6501	Narative Development	4
ISYS6549	Digital Innovation	4
COMP6684	Current Trends in Technology	4
DSGN6834	Visual Identity	4
	Total SCU	20

2. Minor Program: Human Capital in Digital Workplace

	Course	SCU
PSYC6174	Psychology in The Workplace	4
MGMT6349	Digital Workplace Strategy	4
ISYS6551	Digital Workplace and Technology	4
LAWS6157	Legal Aspects in Digital Workplace	4
PSYC6175	PSYC6175 Human Resources Development	
	Total SCU	20

3. Minor Program: Sustainable Development

	Course	SCU
ARCH6119	Introduction to Sustainable Development	2
DSGN6835	Engineering Material	4
ISYE6154	ISYE6154 Sustainable Design and Manufacture	
ISYE6155	Occupational, Health, Safety, and Administration in Engineering	2
CPEN6217	Digital for Sustainable Development	4
CIVL6118	Engineering Economic	4
	Total SCU	20

4. Minor Program: Cross Cultural Communication

	Course	SCU
CHIN6133	Chinese Conversation in Daily Works	2
CHIN6132	Chinese Conversation in Daily Activities	4
CHIN6134	Chinese Conversation in Business Communication	4
COMM6502	Communication in Diversity	2
INTR6135	Comparative Politics	4
BUSS6170	Asian Business Ethics	4
	Total SCU	20

5. Minor Program: Interactive & Users Experience Design

	Course	SCU
PSYC6176	Psychology and User Experience	4
ISYS6553	User-Centered Research and Evaluation	4
DSGN6836	Fundamental of Interface Design	4
ISYS6554	Core Principles: Interactive Design	4
DSGN6837	Digital Design Production	4
	Total SCU	20

6. Minor Program: Digital Business

	Course		SCU
ISYS6559	Business Models and Technology Innovation		4
ISYS6557	Business Data Management		4
ISYS6558	Strategic Digital Business Analysis		4
STAT6149	Practical Statistics for Data and Business Analysis		4
MGMT6352	Digital Strategy		4
		Total SCU	20

7. Minor Program: Virtual Services

Course	SCU
undamental of Virtual Services	2
irtual Financial Services	4
irtual Market Place	4
rirtual Operation and Supply Chain	4
irtual Hospitality Management	4
Seminar on Virtual Services	2
Total SCU	20
,	undamental of Virtual Services irtual Financial Services irtual Market Place irtual Operation and Supply Chain irtual Hospitality Management eminar on Virtual Services

8. Minor Program: Culinary

	Course	SCU
HTMN6078	Advanced in Pastry and Bakery	4
HTMN6050 Culinary Business Event		2/2
HTMN6048	Western and French Cuisine	2/4
HTMN6046 Authentic Indonesian Cuisine		2/4
	Total SCU	20

Appendix: Free Electives (4th Semester & 5th Semester)

No	Course Owner Department	Course Code	Course Name	scu	Semester
1	Business Creation	ENTR6582	Business Strategy	2	4
2	Business Creation	ENTR6494	Managing Growing Business	2	5
3	Business Management	MGMT6401	Digital Supply Chain Management	2	4
4	Business Management	MGMT6400	Supply Chain Strategy	2	5
5	International Business Management	MGMT6369	Corporate Strategy in International Business	2	4
6	International Business Management	MGMT6370	E-Business for International Business	2	5
7	Management	BUSS6109	Business Development	4	4
8	Management	BUSS6171	Business Sustainability	4	4
9	Management	BUSS6173	Managing Innovation and Knowledge	4	4
10	Management	ISYS6079	E-Business System	4	4
11	Management	ISYS8175	E-Business Strategy and Implementation	4	5
12	Management	MGMT6029	Knowledge Management	2	5
13	Management	MGMT6341	Strategic Management	4	5
14	Management	MGMT6412	Customer Relationship Management	2	5
15	Marketing Communication	COMM6435	Global Consumer Behavior	2	4
16	Marketing Communication	COMM6510	Reportage & Interview Technique	2/2	4
17	Marketing Communication	COMM6533	Creative Program Design	2/2	4
18	Marketing Communication	COMM6540	Communication & Public Affairs	2	4
19	Marketing Communication	COMM6514	Editing for Creative Program	2/2	5
20	Marketing Communication	COMM6523	Corporate Event Management	2/2	5
21	Marketing Communication	COMM6538	Media Promotion & Marketing in Creative Broadcasting	2	5
22	Marketing Communication	COMM6539	Media Convergence in Creative Broadcasting	2	5
23	Marketing Communication	COMM6541	Digital Corporate Communication	2/2	5
24	Marketing Communication	COMM6542	Event Management for Brand	2/2	5
25	Marketing Communication	COMM6543	Digital Brand Communicaton	2/2	5
26	Tourism	TRSM6142	Event Management	4	4
27	Tourism	TRSM6204	Heritage Tourism	4	4
28	Tourism	TRSM6208	Tourism Innovation and Product Development	4	5
29	Tourism	TRSM6196	Tourism Community Empowerment	2	5
30	Architecture	ARCH6054	Interior Design Principles	2	4
31	Architecture	ARCH6059	Building Material Knowledge	2	4
32	Architecture	ARCH6047	Behavior in Architecture	2	5
33	Architecture	ARCH6061	Sustainable Architecture	2	5
34	Architecture	ARCH6129	Urban Housing	4	5
35	Architecture	ARCH6132	Leadership Organization Behavior	4	5

No	Course Owner Department	Course Code	Course Name	scu	Semester
36	Civil Engineering	CIVL6007	Harbour Engineering	2	5
37	Civil Engineering	CIVL6009	Urban Drainage	2	5
38	Civil Engineering	CIVL6025	Hydrology	2	5
39	Civil Engineering	CIVL6035	Airport Engineering	2	5
40	Civil Engineering	CIVL6037	Railway Engineering	2	5
41	Civil Engineering	CIVL6080	Construction Methods & Heavy Equipment	2	5
42	Civil Engineering	CIVL8056	Bridge Engineering	2	5
43	Civil Engineering	COMP6046	Computer Applications in Construction Management	2	5
44	Computer Engineering	CPEN6098	Computer Networks	2/2	5
45	Computer Engineering	CPEN6225	Telco Network & Switching System	2	5
46	Computer Engineering	CPEN6232	Cloud Technology Practice	2	5
47	Food Tech	FOOD6073	Current Issues in Food Technology	2	4
48	Food Tech	FOOD6062	Food Quality Assurance System	2/1	5
49	Food Tech	FOOD6063	Food Safety & Sanitation	2/1	5
50	Industrial Engineering	ISYE6041	Engineering Economy	2	4
51	Industrial Engineering	ISYE6181	System Engineering & Analysis	2	4
52	Industrial Engineering	ISYE6067	Global Supply Chain	2	5
53	Industrial Engineering	ISYE6115	Transportation Modeling	2	5
54	Industrial Engineering	ISYE6130	Project Management	2	5
55	Business Law	LAWS6017	Intellectual Property Rights	4	4
56	Business Law	LAWS6167	Legal Philosophy & Professional Ethics	2	5
57	Business Law	LAWS6172	Environmental and Natural Resources Law	2	5
58	Chinese Literature	CHIN6158	Chinese Business in Daily Communication	4	4
59	Chinese Literature	CHIN6159	Chinese Character Writing	2	4
60	Chinese Literature	CHIN6157	Chinese Business for Etiquette (Beginner)	4	5
61	English Literature	SOCS6021	Social and Digital Media Writing	2	4
62	English Literature	ENGL6244	Social Media Broadcasting	4	5
63	International Relations	INTR6144	Contemporary Issues in European Society	2	4
64	International Relations	INTR6145	Contemporary Issues in American Society	2	4
65	International Relations	INTR6146	Contemporary Issues in East Asian Society	2	4
66	International Relations	INTR6147	Contemporary Issues in African and Middle Eastern Societies Japanese Corporate Culture and	2	4
67	Japanese Literature	JAPN6116	Management (Nihon No Kigyou Bunka to Manejimento)	2	5
68	Primary Teacher Education	EDUC6040	Child Games	2	4
69	Primary Teacher Education	EDUC6032	Art & Craft	2	5
70	Primary Teacher Education	EDUC8004	School Based Management	2	5

No	Course Owner Department	Course Code	Course Name	scu	Semester
71	Psychology	PSYC6124	Psychology of Early Childhood Education	4	4
72	Psychology	PSYC6125	Psychology of Special Needs Education	4	4
73	Psychology	PSYC6145	Urban Psychology	4	4
74	Cyber Security	COMP6582	Computer Security	2	4
75	Game Application & Technology	GAME6082	Game Animation	2	4
76	Mobile Application & Technology	MOBI6059	Mobile Programming	2	5
77	Statistics	STAT6158	Data Management and Organization	2	5
78	Computer Science	COMP7084	Multimedia Systems	2/1	4
79	Computer Science	COMP6232	Human and Computer Interaction	2/2	5
80	Computer Science	COMP6578	Information Visualization	2	5
81	Animation	DSGN6692	Character Animation	4	4
82	Animation	DSGN6693	Motion Graphic	4	4
83	Animation	DSGN6694	Visual Effect (VFX)	4	4
84	Animation	DSGN6695	Asset Creation	4	4
85	Animation	DSGN6689	Concept Art & Production Design	2	5
86	Animation	DSGN6690	Animation Storytelling	2	5
87	Creative Advertising	DSGN6671	Creative Writing for Commercials	4	4
88	Creative Advertising	MDIA6046	Audio Visual (Pre Production and Production)	4	4
89	Creative Advertising	DSGN6732	Photography	4	5
90	Film	FILM6026	History of Indonesian Cinema	2	4
91	New Media	DSGN6743	Digital Graphic Reproduction	4	4
92	Interior Design	DSGN6608	Interior Design and culture	2	4
93	Interior Design	DSGN6611	Business in Interior Design	2	4
94	Interior Design	DSGN6886	Rendering and Presentation Techniques	2	4
95	Business Information Technology	ISYS6606	Smart Application	2	4
96	Business Information Technology	ISYS6579	Knowledge-Based Al: Cognitive Systems	4	5
97	Information Systems	ISYS6016	Social Media Fundamental	2	4
98	Information Systems	ISYS6084	Database	2/2	4
99	Information Systems	ISYS6210	Data Visualization	2	4
100	Information Systems	ISYS6285	Digital and New Media	2	4

Enrichment Program I (6th Semester) & Enrichment Program II (7th Semester):

⁻⁾ Student will take one of enrichment program tracks (off campus). See enrichment appendix for the tracks detail.

Enrichment Track Scheme

Track			Seme	ster 6					Semes	ster 7		
Hack	IN	RS	EN	CD	SA	etc	IN	RS	EN	CD	SA	etc
1	٧						٧					
2		٧						٧				
3				٧						٧		
4					٧						٧	
5			٧						V			

Note:

IN : Internship CD : Community Development

RS : Research SA : Study Abroad

EN : Entrepreneurship etc : Study Program Special Purposes

Description:

Student will take one of enrichment program tracks

Enrichment Internship Track

Code	Course Name	SCU	Total		
Enrichment	Enrichment Program I				
ARCH6091	Industry Experience	8	20		
ARCH6140	Integrated Architectural Design	8	20		
ARCH6138	Project Programme	4			
Enrichment	Program II				
ARCH6104	Internship	8	20		
ARCH6141	Advanced Integrated Architectural Design	8	20		
ARCH6093	Advanced Project Programme	4			

Enrichment Entrepreneurship Track

Code	Course Name	SCU	Total	
Enrichment Program I				
ENTR6935	New Venture Architectural Initiation	8	20	
ENTR6937	Architectural Product Development Process	8	20	
ENTR6571	EES in New Architectural Business I	4		
Enrichment	Program II			
ENTR6936	Architectural Product Launching	8	20	
ENTR6938	Architectural Business Development	8	20	
ENTR6572	EES in New Architectural Business II	4		

Enrichment Research Track

Code	Course Name	SCU	Total	
Enrichment Program I				
RSCH6484	Research Experience I	8	20	
RSCH6571	Architectural Scientific Writing I	8	20	
RSCH6488	Global EES in Architecture I	4		
Enrichment Program II				
RSCH6485	Research Experience II	8	20	
RSCH6572	Architectural Scientific Writing II	8	20	
RSCH6489	Global EES in Architecture II	4		

Enrichment Community Development Track

Code	Course Name	SCU	Total		
Enrichment Program I					
CMDV6276	Community Outreach Project Implementation I	8			
CMDV6345	Community-Based Architecture I	8	20		
CMDV6280	Employability and Entrepreneurial Skills in Architecture Community I	4			
Enrichment Program II					
CMDV6277	Community Outreach Project Implementation II	8			
CMDV6346	Community-Based Architecture II	8	20		
CMDV6281	Employability and Entrepreneurial Skills in Architecture Community II	4			

Enrichment Study Abroad Track*

Code	Course Name	SCU	Total	
Elective courses list for study abroad*				
Enrichment	Program I			
GLOB6005	Elective Course for Study Abroad 1	4		
GLOB6006	Elective Course for Study Abroad 2	4		
GLOB6007	Elective Course for Study Abroad 3	4		
GLOB6008	Elective Course for Study Abroad 4	4		
GLOB6009	Elective Course for Study Abroad 5	2		
GLOB6010	Elective Course for Study Abroad 6	2		
GLOB6011	Elective Course for Study Abroad 7	2	20	
GLOB6012	Elective Course for Study Abroad 8	2		
GLOB6013	Elective Course for Study Abroad 9	2		
GLOB6014	Elective Course for Study Abroad 10	2		
GLOB6015	Elective Course for Study Abroad 11	2		
GLOB6016	Elective Course for Study Abroad 12	2		
GLOB6249	Elective Course for Study Abroad 27	3		
GLOB6250	Elective Course for Study Abroad 28	3		
GLOB6251	Elective Course for Study Abroad 29	4		

Code	Course Name	SCU	Total	
Enrichment Program II				
GLOB6017	Elective Course for Study Abroad 13	4		
GLOB6018	Elective Course for Study Abroad 14	4		
GLOB6019	Elective Course for Study Abroad 15	4		
GLOB6020	Elective Course for Study Abroad 16	4		
GLOB6021	Elective Course for Study Abroad 17	2		
GLOB6022	Elective Course for Study Abroad 18	2		
GLOB6023	Elective Course for Study Abroad 19	2	00	
GLOB6024	Elective Course for Study Abroad 20	2	20	
GLOB6025	Elective Course for Study Abroad 21	2		
GLOB6026	Elective Course for Study Abroad 22	2		
GLOB6027	Elective Course for Study Abroad 23	2		
GLOB6028	Elective Course for Study Abroad 24	2		
GLOB6041	Elective Course for Study Abroad 25	3		
GLOB6252	Elective Course for Study Abroad 30	3		
GLOB6253	Elective Course for Study Abroad 31	4		

^{*)} Transferred courses will be transferred based on credit transfer policies on study program with total of 20 credits.

Student should pass all of these quality controlled courses as listed below:

No.	Course Code	Course Name	Minimal Grade
1.	CHAR6013	Character Building: Pancasila	В
2.	ENTR6511	Entrepreneurship: Market Validation	С
3.	ARCH6042	Architectural Design I*	С
4.	ARCH6043	Architectural Design II*	С
5.	ARCH6044	Architectural Design III	С
6.	ARCH6139	Site Planning*	С
7.	ARCH6001	Introduction to Architecture	С
8.	ARCH6006	Seminar	C

^{*)} Tutorial & Multipaper