Republic of the Philippines
OFFICE OF THE PRESIDENT
COMMISSION ON HIGHER EDUCATION

CHED MEMORANDUM ORDER
No. 61
Series of 2017

SUBJECT: POLICIES, STANDARDS AND GUIDELINES FOR THE BACHELOR OF SCIENCE IN ARCHITECTURE (BS ARCHI)

In accordance with the pertinent provisions of Republic Act (RA) No. 7722, otherwise known as the "Higher Education Act of 1994," in pursuance of an outcomes-based quality assurance system as advocated under CMO No. 46 s. 2012 entitled "Policy Standards to Enhance Quality Assurance (QA) in Philippine Higher Education Through an Outcomes-Based and Typology-Based QA", and by virtue of Commission en banc Resolution No. 231-2017 dated March 28, 2017, the following policies, standards and guidelines (PSGs) are hereby adopted and promulgated by the Commission.

ARTICLE I
INTRODUCTION

Section 1. Rationale

Architectural education is concerned with producing graduates with comprehensive knowledge, appropriate skills and a professional attitude in the practice of architecture together with their total growth and development within the framework of democratic ideals and values, and the promotion of sustainable development and the conservation of architectural heritage within the global context, thus making the architecture curriculum relevant to the present needs and latest international trends.

The Architecture Education Policies, Standards and Guidelines (PSG) was reviewed in accordance with the shift to the outcomes-based education, industry needs, latest trends and technology in the field of architecture and in compliance with international requirements. The revision of PSG emerged as result of consolidated effort of the academe, government regulatory board, industry and other related agencies.

This PSG states in general terms the desired outcomes and strategies for achieving the goals of architectural education. It shall:

1. define the competency standards applicable to architectural discipline and expected of a graduate of an architecture program.

2. provide guidance towards an outcomes-based architecture education

3. determine the required minimum set of learning outcomes for architecture program as the expression of minimum standards, and

4. determine and prescribe the minimum credit unit requirements that will lead to the attainment of architecture program outcomes.

For this purpose, this CMO prescribes the use of a curriculum map as the basic means to derive the courses and credit units from the required set of architecture program outcomes. Nevertheless, this PSG shall allow space for innovation by HEIs to design curricula suited for their own contexts and missions and argue that the same leads to the attainment of the required minimum set of outcomes, albeit by a different route or strategy. The HEIs shall have latitude in designing and specifying the various aspects of outcomes-based education such as performance indicators, syllabi, means of curriculum delivery, resources deployed, student assessment, program assessment and evaluation and continuous quality improvement system.

ARTICLE II
AUTHORITY TO OPERATE

Section 2. Government Recognition

All private higher education institutions (PHEIs) intending to offer Bachelor of Science in Architecture must first secure proper authority from the Commission in accordance with existing rules and regulations. State Universities and Colleges (SUCs), and local colleges and universities should likewise strictly adhere to the provisions in this policies and standards.

Advertisement to accept enrollees shall be made of any architecture program only after its authority to operate has been issued by the CHED.

2.1 Compliance to PSG for Architecture Education

a. Issuance of Renewal Permit

Permit may be issued or renewed upon compliance with the requirements prescribed herein.

b. Recognized/ under permit Architecture Programs

The herein Policies, Standards and Guidelines for Architecture Education shall be observed in the implementation of the requirements for recognized/ under permit architecture program

ARTICLE III
GENERAL PROVISIONS

Per Section 13 of RA 7722, the higher education institution shall exercise academic freedom in its curricular offerings but must comply with the minimum requirements for specific academic programs, the general education distribution requirements and the specific professional courses.

Section 3. The Articles that follow give minimum standards and other requirements and prescriptions. The minimum standards are expressed as a minimum set of desired program outcomes which are given in Article IV Section 6. The CHED designed a curriculum to attain such outcomes. This curriculum is shown in Article V Section 8 as a sample curriculum. The number of units of this curriculum is here prescribed as the "minimum unit requirement" under Section 13 of RA 7722. In designing the curriculum the CHED employed a curriculum map which is shown in Article V Section 9 as a sample curriculum map.

Using a learner-centered/outcomes-based approach the CHED also determined appropriate curriculum delivery methods shown in Article V Section 10. The sample course syllabi given in Article V Section 11 show some of these methods.

Based on the curriculum and the means of its delivery, the CHED determined the physical resource requirements for the library, laboratories and other facilities and the human resource requirements in terms of administration and faculty. See Article VI.

Section 4. The HEIs are allowed to design curricula suited to their own contexts and missions provided that they can demonstrate that the same leads to the attainment of the required minimum set of outcomes, albeit by a different route. In the same vein, they have latitude in terms of curriculum delivery and in terms of specification and deployment of human and physical resources as long as they can show that the attainment of the program outcomes and satisfaction of program educational objectives can be assured by the alternative means they propose.

The HEIs can use the **CHED Implementation Handbook for Outcomes-Based Education (OBE) and the Institutional Sustainability Assessment (ISA)** as a guide in making their submissions for Sections 16, 17 and 18 of Article VII.

ARTICLE IV
PROGRAM SPECIFICATIONS

Section 5. Program Description

5.1 Degree Name

The degree program described herein shall be called **Bachelor of Science in Architecture.**

5.2 Nature of the Field of Study

The practice of architecture is the act of planning and architectural designing, structural conceptualization, designing of built structures and their environment, specifying, supervising and giving general administration and responsible direction to the erection, enlargement or alterations of buildings and building environments and architectural design in engineering structures or any part thereof; the scientific, aesthetic, and orderly coordination of all the processes which enter into the production of a complete building or structure, performed through the medium of unbiased preliminary studies of plans, consultations, specifications, conferences, evaluations, investigations, contract documents and oral advice and directions regardless of whether the persons engaged in such practice are residents of the Philippines or have their principal office or place of business in this country or another territory, and regardless whether such persons are performing one or all of these duties, or whether such duties are performed in person or as the directing head of an office or organization performing them.

5.3 Program Educational Objectives (PEOs)

The objectives of the Bachelor of Science in Architecture are to develop the following outcomes:

a. Perform standard competencies in accordance with the scope of the global and local practice of architecture.

b. Show traits of professionalism, sense of responsibility, equality and patriotism.

c. Receptiveness to new ideas and knowledge through scientific research;

d. Direct and focus the thrust of architecture education to the needs and demands of society and its integration into the social, economic, cultural and environmental aspects of nation building.

e. Instil understanding of the basic philosophy and fundamental principles of the multi-dimensional aspects of architecture, and the direct relationship between man and his environment.

5.4 Specific Professions/careers/occupations for graduates after meeting the required qualifications

The graduates of an architecture program may go into the following fields of practice:

For professionals:

a. Architectural Design, Pre-design services for architecture
b. Housing
c. Physical Planning
d. Urban Design
e. Community Architecture

f. Facility Planning
g. Construction Technology
h. Construction Management
i. Project Management
j. Building Administration and Maintenance
k. Real Estate Development
l. Architectural Education
m. Research and Development.
n. Restoration/Conservation
o. Architectural Interiors
p. Expert Witness Service
q. Design-build Services

For graduates:

a. Architectural drafting
b. CADD operator
c. Project Coo rdinator
d. Project Supervisor/Inspector
e. Project estimate
f. Rendering (manual and electronic)
g. Scale modelling

5.5 Allied Fields

The fields of study related to architecture are interior design, landscape architecture, urban design, urban planning, regional planning, environmental planning, housing, engineering, real estate development, educational management, business management, project management, construction management and technology, building administration and maintenance and architectural research, as embodied in RA 9266 including its implementing rules and regulations and the Architects' National code.

Section 6. Program Outcomes

The minimum standards for the BS Architecture program are expressed in the following minimum set of learning outcomes:

6.1 Common to all programs in all types of schools

a. to keep abreast with the developments in the field of architecture practice. (PQF level 6 descriptor)
b. the ability to effectively communicate orally and in writing using both English and Filipino
c. The ability to work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)
d. A recognition of professional, social, and ethical responsibility

6.2 Common to the discipline

a. Creation of architectural solutions by applying knowledge in history, theory, planning, building technology and utilities, structural concepts and professional practice. (design, BT, UT, PP, ES/AS, HOA/TOA, PLN)

b. Use of concepts and principles from specialized fields and allied disciplines into various architectural problems. (LA, IA, HC, PLN, EMP, BU 1-2-3, ES/AS, TOA)

c. Preparation of contract documents, technical reports and other legal documents used in architectural practice adhering to applicable laws, standards and regulations. (DES, PP 1-2-3, BT 3, BU 1-2-3-4-5, HSNG,PLN, ENG3,)

d. Interpretation and application of relevant laws, codes, charters and standards of architecture and the built environment. (DES, BT 1,HSNG, BU 1-2-3, PLN)

e. Application of research methods to address architectural problems.(RMA, ENG 3)

f. Use of various information and communication technology (ICT) media for architectural solutions, presentation, and techniques in design and construction. (VT 1-2-3, CADD 1-2)

g. Acquisition of entrepreneurial and business acumen relevant to Architecture practice.

h. Involvement in the management of the construction works and Building administration. (PP, BT, BU, Const. Mgmt., ES/AS)

6.3 Common to a horizontal type as defined in CMO No. 46 s. 2012

- For professional institutions: a service orientation in one's profession

- For colleges: an ability to participate in various types of employment, development activities, and public discourses particularly in response to the needs of the community.

- For universities: an ability to participate in the generation of new knowledge such as pioneering concepts and ideas of site and building designs beyond the regular physical and location boundaries and contexts.

Graduates of State Universities and Colleges must, in addition, have the competencies to support "national, regional and local development plans." (RA 7722)

A PHEI, at its option, may adopt mission-related program outcomes that are not included in the minimum set.

ARTICLE V
CURRICULUM

Section 7. Curriculum Description

7.1. The BS Architecture program has a total of 205 credit units. The program comprises of general education, technical courses (mathematics, natural sciences, basic engineering sciences, professional, allied, and specialization courses).

7.2 The general education courses are in accordance with the requirements of the CHED Memorandum Order No. 20, s. 2013 – General Education Curriculum: Holistic Understanding, Intellectual and Civic Competencies to equip graduates with a basis for critical thinking abilities and values formed from other methods and theories of other disciplines .

Section 8. Sample Curriculum

8.1 Classification

CLASSIFICATION/FIELD/COURSE	Total No. of Hours		Total No. of Units
	Lecture	Lab/Studio	
I. TECHNICAL COURSES			
Mathematics			
Solid Mensuration	2	0	2
Differential and Integral Calculus	3	0	3
Sub-Total	**5**	**0**	**5**
B. Basic Engineering Courses			
Statics of Rigid Bodies	3	0	3
Strength of Materials	3	0	3
Theory of Structures	3	0	3
Steel and Timber Design	3	0	3
Architectural Structures	3	0	3
Surveying	2	3	3
Sub-Total	**17**	**3**	**18**
C. Allied Courses			
Architectural Visual Communications 1- Graphics 1	1	6	3
Architectural Visual Communications 2- Visual Techniques 1	1	3	2
Architectural Visual Communications 3 – Graphics 2	1	6	3
Architectural Visual Communications 4 – Visual Techniques 2	1	3	2
Architectural Visual Communications 5 – Visual Techniques 3	1	3	2

CLASSIFICATION/FIELD/COURSE	Total No. of Hours		Total No. of Units
	Lecture	Lab/Studio	
Sub-Total	**5**	**21**	**12**
D. Professional Courses			
Architectural Design 1 – Introduction to Design	1	3	2
Architectural Design 2-Creative Design Fundamentals	1	3	2
Architectural Design 3 – Creative Design in Architectural Interiors	1	6	3
Architectural Design 4 – Space Planning 1	1	6	3
Architectural Design 5 – Space Planning 2	1	9	4
Architectural Design 6 – Site Development Planning and Landscaping	1	9	4
Architectural Design 7 – Community Architecture and Urban Design	1	12	5
Architectural Design 8 – Design of Complex Structures	1	12	5
Architectural Design 9 – Thesis Research Writing	1	12	5
Architectural Design 10-Thesis Research Application	1	12	5
Architectural Interiors	1	1	2
Theory of Architecture 1	1	1	2
Theory of Architecture 2	2	0	2
Building Technology 1 – Building Materials	3	0	3
Building Technology 2-Construction Drawings in Wood, Steel and Concrete (1 Storey Building)	2	3	3
Building Technology 3 - Construction Drawings in Wood, Steel and Concrete (2 Storey Building)	2	3	3
Building Technology 4 - Specification Writing and Quantity Surveying	2	3	3
Building Technology 5 - Alternative Building Construction Systems	2	3	3
Building Utilities 1 (BU 1) - Plumbing and Sanitary Systems	2	1	3
Building Utilities 2 (BU 2) – Electrical, Electronics and Mechanical Systems	2	1	3
Building Utilities 3 (BU 3) - Acoustics and Lighting Systems	2	1	3
History of Architecture 1	2	0	2
History of Architecture 2	2	0	2
History of Architecture 3	2	0	2
History of Architecture 4	2	0	2
Professional Practice 1 (Laws Affecting the Practice of Architecture)	3	0	3
Professional Practice 2 (Administering the Regular Services of the Architecture)	3	0	3
Professional Practice 3 (Global Practice for the 21st Century)	3	0	3
Planning 1 - Site Planning and Landscape Architecture	3	0	3
Planning 2 - Fundamentals of Urban Design and Community Architecture	3	0	3
Planning 3 - Introduction to Urban and Regional Planning	3	0	3

CLASSIFICATION/FIELD/COURSE	Total No. of Hours		Total No. of Units
	Lecture	Lab/Studio	
Computer-Aided Design & Drafting for Architecture 1	1	3	2
Computer-Aided Design & Drafting for Architecture – 2 / BIM	1	3	2
Research Methods for Architecture	3	0	3
Tropical Design	2	0	2
Housing	2	0	2
Business Management & Application for Architecture 1	3	0	3
Business Management & Application for Architecture 2	3	0	3
Sub-Total	**70**	**111**	**111**
F. Specialization Courses			
Specialization 1	3	0	3
Specialization 2	3	0	3
Specialization 3	3	0	3
Sub-Total	**9**	**0**	**9**
TOTAL (Technical Courses)	**109**	**135**	**155**
II. NON- TECHNICAL COURSES			
A. General Education Core Courses			
Understanding the Self	3	0	3
Readings in Philippine History	3	0	3
Mathematics in the Modern World	3	0	3
The Contemporary World	3	0	3
Ethics	3	0	3
Science,Technology, & Society	3	0	3
Purposive Communication	3	0	3
Art Appreciation	3	0	3
Sub-Total	**24**	**0**	**24**
B. General Education Elective Courses			
GE Elective 1	3	0	3
GE Elective 2	3	0	3
GE Elective 3	3	0	3
Sub-Total	**9**	**0**	**9**
C. Mandated Subject			
Life and Works of Rizal	3	0	3
Sub-Total	**3**	**0**	**3**
TOTAL (Non- Technical Courses)	**36**	**0**	**36**
III. NON- ACADEMIC (MISCELLANY) COURSES			
PE 1	2	0	2
PE 2	2	0	2
PE 3	2	0	2
PE 4	2	0	2
NSTP 1	3	0	3
NSTP 2	3	0	3

CLASSIFICATION/FIELD/COURSE	Total No. of Hours		Total No. of Units
	Lecture	Lab/Studio	
Sub-Total	14	0	14
TOTAL (Non- Academic Courses)	14	0	(14)
GRAND TOTAL (including P.E./NSTP)	252	135	205
GRAND TOTAL (excluding P.E./NSTP)	238	135	191

Section 9. Sample Curriculum Map (See attached Annex B)

Legend for Curriculum Map

Introduced	– Students gets introduced to concepts/ principles	I
Practiced	– Students practices the competencies with supervision	P
Demonstrated	– Student practice the competencies across different settings with minimal supervision	D

Section 10. Sample/ Model program of study

The institution may enrich the sample/model program of study depending on the needs of the industry, provided that all prescribed courses/competencies required in the curriculum outlines are offered and pre-requisite are observed.

FIRST YEAR

1ST YEAR – 1ST SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ *(Corequisite)*
	Lec	Lab	Stu-dio	Lec	Lab	Stu-dio		
Solid Mensuration	2			2			2	College Algebra/ Plane Trigonometry
Understanding the Self	3			3			3	None
Art Appreciation	3			3			3	None
Architectural Design 1 - Introduction to Design	1		1	1		3	2	None
Architectural Visual Communications 1- Graphics 1	1		2	1		6	3	None
Architectural Visual Communications 2 - Visual Techniques 1	1		1	1		3	2	None
Theory of Architecture 1	1		1	1		3	2	None
History of Architecture 1	2			2			2	None
PE 1							2	None
NSTP 1							3	None
Sub-total	**14**	**0**	**5**	**14**	**0**	**15**	**24**	

1ST YEAR – 2ND SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ (*Corequisite*)
	Lec	Lab	Stu-dio	Lec	Lab	Stu-dio		
Differential and Integral Calculus	3			3			3	College Algebra/Plane Trigonometry
Readings in Philippine History	3			3			3	None
Building Technology 1 - Building Materials	3			3			3	None
Architectural Interiors	1		1	1		3	2	Theory of Architecture 1
Architectural Design 2 - Creative Design and Fundamentals	1		1	1		3	2	Architectural Design 1, Theory of Architecture 1
Architectural Visual Communications 3-Graphics 2	1		2	1		6	3	Architectural Visual Communications 1
Architectural Visual Communications 4 - Visual Techniques 2	1		1	1		3	2	Architectural Visual Communications 2
Theory of Architecture 2	2			2			2	Theory of Architecture 1
PE 2							2	PE 1
NSTP2							3	NSTP 1
Sub-total	**15**	**0**	**5**	**15**	**0**	**15**	**25**	

SECOND YEAR

2ND YEAR- 1ST SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ (*Corequisite*)
	Lec	Lab	Studio	Lec	Lab	Studio		
Architectural Design 3 - Creative Design in Architectural Interiors	1		2	1		6	3	Architectural Design 2, Theory of Architecture 2, Architectural Interiors
Mathematics in the Modern World	3			3			3	None
Purposive Communication	3			3			3	None
Science, Technology, & Society	3			3			3	None
Building Utilities 1 - Plumbing and Sanitary Systems	2		1	2		3	3	None
Architectural Visual Communications 5 - Visual Techniques 3	1		1	1		3	2	Architectural Visual Communications 4
Tropical Design	2			2			2	None
History of Architecture 2	2			2			2	History of Architecture 1
PE 3							2	PE 1
Sub-total	**17**	**0**	**4**	**17**	**0**	**12**	**23**	

2ND YEAR– 2ND SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ (*Corequisite*)
	Lec	Lab	Stu-dio	Lec	Lab	Stu-dio		
Architectural Design 4- Space Planning 1	1		2	1		6	3	Architectural Design 3
The Contemporary World	3			3			3	None
Ethics	3			3			3	None
Statics of Rigid Bodies	3			3			3	Analytic Geometry
Surveying	2	1		2	3		3	College Algebra/ Plane Trigonometry
Building Technology 2 - Construction Drawings in Wood, Steel and Concrete (1-Storey)	2		1	2		3	3	Building Technology 1, Building Utilities 1
History of Architecture 3	2			2			2	History of Architecture 2
PE 4							2	PE 1
Sub-total	**17**	**1**	**4**	**17**	**6**	**9**	**22**	

"Certificate in Drafting Technology shall be granted upon completion of all prescribed courses from 1st year- 1st semester to 2nd year -2nd semester"

THIRD YEAR

3rd YEAR – 1ST SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ (*Corequisite*)
	Lec	Lab	Stu-dio	Lec	Lab	Stu-dio		
Architectural Design 5- Space Planning 2	1		3	1		9	4	Architectural Design 4
Strength of Materials	3			3			3	Statics of Rigid Bodies
Life and Works of Rizal	3			3			3	None
Computer-Aided Design & Drafting for Architecture 1	1		1	1	3		2	Architectural Visual Communications 5
Building Technology 3 - Construction Drawings in Wood, Steel and Concrete (2 storey Res. Structure)	2		1	2		3	3	Building Technology 2, Building Utilities 1
Building Utilities 2 (BU 2) – Electrical, Electronics and Mechanical Systems	2		1	2		3	3	Building Utilities 1
History of Architecture 4	2			2			2	History of Architecture 3
Sub-total	**17**	**1**	**5**	**17**	**3**	**15**	**20**	

3rd YEAR – 2nd SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ *(Corequisite)*
	Lec	Lab	Stu-dio	Lec	Lab	Stu-dio		
Professional Practice 1 (Laws Affecting the Practice of Architecture)	3			3			3	None
Computer-Aided Design & Drafting for Architecture 2/BIM	1	1		1	3		2	Computer-Aided Design & Drafting for Architecture 1
Architectural Design 6- Site Development Planning and Landscaping	1		3	1		9	4	Architectural Design 5
Theory of Structures	3			3			3	Strength of Materials
Building Technology 4- Specification Writing and Quantity Surveying	2		1	2		3	3	Building Technology 3
Building Utilities 3 (BU 3) - Acoustics and Lighting Systems	3		1	3	3		3	Building Utilities
Planning 1 – Site Planning & Landscape Architecture	3			3			3	Surveying, Tropical Architecture
Sub-total	**17**	**0**	**5**	**17**	**6**	**12**	**21**	

"Certificate in CADD shall be granted after completion of all prescribed courses from 1st year- 1st semester to 3rd year- 2nd semester"

FOURTH YEAR

4TH YEAR – 1ST SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ *(Corequisite)*
	Lec	Lab	Stu-dio	Lec	Lab	Stu-dio		
Architectural Design 7- Community Architecture and Urban Design	1		4	1		12	5	Architectural Design 6
Steel and Timber Design	3			3			3	Theory of Structures
Building Technology 5 - Alternative Building Construction Systems	2		1	2		3	3	Building Technology 3
Professional Practice 2 (Administering the Regular Services of the Architect)	3			3			3	Professional Practice 1
Planning 2 - Fundamentals of Urban Design & Community Architecture	3			3			3	Planning 1
Research Methods for Architecture	3			3			3	Junior Standing,
Sub-total	**15**	**0**	**5**	**15**	**0**	**15**	**20**	

"Certificate in Building Technology and Utilities shall be granted after completion of all prescribed courses from 1st year - 1st semester to 4th year - 1st semester"

4TH YEAR – 2ND SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ *(Co-requisite)*
	Lec	Lab	Field	Lec	Lab	Field		
*Specialization 1	3			3			3	Architectural Design 7
Professional Practice 3 (Global Practice in the 21st Century)	3			3			3	Professional Practice 2
GE Elective 1	3			3			3	None
GE Elective 2	3			3			3	None
Planning 3 - Introduction to Urban & Regional Planning	3			3			3	Planning 2
Architectural Design 8- Design of Complex Structures	1		4	1		12	5	Architectural Design 7
Sub-total	**16**	**0**	**4**	**16**	**0**	**12**	**20**	

FIFTH YEAR

5TH YEAR - 1ST SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ *(Corequisite)*
	Lec	Lab	Stu-dio	Lec	Lab	Stu-dio		
GE Elective 3	3			3			3	None
Architectural Structures	3			3			3	Steel and Timber Design
Housing	2			2			2	Planning 2 , Professional Practice 1
Business Management & Application for Architecture 1	3			3			3	Professional Practice 3
Architectural Design 9 - Thesis Research Writing	1		4	1		12	5	All courses in 1st year - 4th year level
*Specialization 2	3			3			3	Specialization 1
Sub-total	**12**	**0**	**4**	**12**	**0**	**12**	**19**	

5TH YEAR - 2ND SEMESTER

Subjects	Units			Hours/Week			Total No. of units	Prerequisite/ *(Corequisite)*
	Lec	Lab	Stu-dio	Lec	Lab	Stu-dio		
Business Management & Application for Architecture 2	3			3			3	Professional Practice 3
Architectural Design 10 - Thesis Research Application	1		4	1		12	5	Architectural Design 9
*Specialization 3	3			3			3	Specialization 2
Sub-total	**7**	**0**	**4**	**7**	**0**	**12**	**11**	

***Suggested Specialization Courses**

Community Planning Development
Urban Design
Construction Management
Project Management
Facilities /Building Administration
Geographic Information System (GIS)
(OTHER Topic Areas)

Section 11. Sample Means of Curriculum Delivery

11.1 To attain the program outcomes, the school/college of architecture shall ensure that the faculty follow a program or set of activities based on the approved course syllabi.

11.2 As a means of curriculum delivery, teachings methods and techniques must be designed and implemented to provide a quality learning environment which nurtures the creativity and artistic sensibilities while encouraging students to be responsive to social development and environmental issues.

11.3 To improve curriculum delivery, it shall be the policy of the Architectural institutions to support and encourage the following:

a. Field visitations to any appropriate on-going construction site and architectural and heritage tours.
b. Participation of students in design competitions, relevant seminars, culture and educational activities outside the school for the enhancement of their skills.
c. Invitation of leading practicing architects and allied professionals to conduct informative lectures on current architectural trends and engineering technologies.
d. Participation in the design of community-based projects including public buildings and sites.
e. Other teaching and learning activities which shall enhance student competence and proficiency.

Section 12. Sample Syllabi for All Courses

A sample course syllabus for the BS Architecture program is contained in **Annex C** of this Memorandum. Each syllabus should include:

1. Program Outcomes
2. Course Name
3. Course Code
4. Course Description
5. Number of units for lecture and laboratory/studio
6. Number of contact hours per week
7. Prerequisites
8. Course Outcomes
9. Course Outline
10. Teaching and Learning Activities
11. Assessment tasks

12. Class Policy
13. Suggested Textbooks and References
14. Grading System
15. Authorization

Section 13. Sample Performance Indicators

	PROGRAM OUTCOMES	PERFORMANCE INDICATORS
a	Creation of architectural solutions by applying knowledge in history, theory, planning, building technology and utilities, structural concepts and professional practice.	• Ability to conceptualize design development outputs; Assess the client's needs, opportunities, and constraints • Develop and/or review a program with the client • Develop a vision and goals for the project • Develop or review client's design standards and guidelines • Establish sustainability goals for the project • Define the scope of the pre-design services • Develop or review master plan • Establish requirements of site survey(s) • Review site survey(s) • Review geotechnical and hydrological conditions • Evaluate and compare alternative sites • Perform site analysis • Assess environmental, social, and economic conditions related to project • Document and evaluate existing conditions • Identify requirements of regulatory agencies • Prepare and present submittals for governmental approval • Perform code analyses (e.g., building, energy, accessibility)
b	Use of concepts and principles from specialized fields and allied disciplines into various architectural problems.	• Ability to incorporate specialized fields and allied disciplines in the preparation of contract documents; • Identify requirements of regulatory agencies • Prepare and present submittals for governmental approval Analyze and design basic structural elements and systems Coordinate building systems (e.g., structural, mechanical, electrical, fire safety, security, telecommunications/data) and reconcile systems' conflicts Apply sustainable design principles
c	Interpretation and application of relevant laws, codes, charters and standards of architecture and the built environment.	• Ability to apply relevant laws, codes, charters and standards of architecture and the built environment in the preparation of contract documents; • Perform code analyses (e.g., building, energy, accessibility) • Review project with code officials

	PROGRAM OUTCOMES	PERFORMANCE INDICATORS
		• Submit documents to approval agencies and obtain approvals
d	Application of research methods to address architectural problems.	• Ability to relate results of research in architectural design;
e	Use of various information and communication technology (ICT) media for architectural solutions, presentation, and techniques in design and construction.	• Ability to use multimedia techniques;
f	Acquisition of entrepreneurial and business acumen relevant to architecture practice.	• Understand architectural office processes / practices ; • Ability to prepare basic feasibility studies; • Obtain and maintain professional and business licenses • Manage project revenues and expenses • Calculate hourly billing rates • Negotiate and establish fees for basic and additional services and reimbursable expenses • Invoice for services rendered and reimbursable expenses • Develop and manage positive client relationships • Develop leadership skills to enable successful practice • Identify and articulate leadership traits required to maintain a successful and healthy office environment in an architecture firm • Contribute your talents in a community-based organization to improve the quality of life
g	Preparation of contract documents, technical reports and other legal documents used in architectural practice adhering to applicable laws, standards and regulations.	• Ability to prepare complete sets of contract documents; • Perform code analyses (e.g., building, energy, accessibility) • Review project with code officials • Submit documents to approval agencies and obtain approvals • Prepare specifications based on performance criteria • Research, select, and specify materials • Prepare specifications based on performance criteria • Research, select, and specify materials
h	Involvement in the management of the construction works	• Ability to assist in the construction supervision works; • Perform or review a feasibility study to determine

	PROGRAM OUTCOMES	PERFORMANCE INDICATORS
	and building administration.	the cost and/or technical advisability of a proposed project • Establish preliminary project scope, budget, and schedule • Prepare and/or evaluate estimates of probable construction costs • Perform value engineering of selected building elements • Perform life cycle cost analysis of selected building elements • Respond to Requests for Information (RFI) Conduct on-site observations • Document and communicate status to owner and constructor • Resolve constructability issues Issue Architect's Supplemental Instructions (ASI) • Process shop drawings and submittals • Process Change Orders • Review and certify contractor's application for payment • Review material test reports • Record changes to the contract documents • Provide substantial and final completion services • Prepare and manage design contracts (owner/architect) • Prepare and execute professional services contracts (architect/consultant) • Attend, conduct, and record meetings throughout all phases • Select, manage, and coordinate consultants • Partner with the owner's project delivery team • Prepare and manage design team schedule and budget (consultant and staff costs) • Obtain client authorization to proceed per contract phases • Document project status and progress • Monitor project construction costs • Prepare owner/contractor agreement • Conduct post-occupancy evaluation • Identify the project design team members and their required scope of services, roles, and responsibilities (e.g., architects, engineers, specialty consultants) • Identify the project delivery team's roles and responsibilities (e.g., owner, architect, contractor, program manager) • Identify project delivery method

ARTICLE VI
REQUIRED RESOURCES

Section 14. Administration

The effective implementation of a functional architectural program shall be administered by a well – organized and highly competent staff and faculty, with appropriate professional degrees and credentials relevant to their duties as required under existing rules of the Commission on Higher Education.

Each architectural institution shall have at least a dean/head and whenever needed, a vice / assistant dean/ head.

14.1 Dean

Dean/Head of the Institution/Program - A dean/head shall be appointed to provide general administration, leadership and direction to the architectural education program of the institution.

14.1.1 General Qualifications:

a. Must be a registered architect and an active member of a professional organization duly accredited by the Professional Regulation Commission.

b. Preferably a Ph.D. holder in architecture or in any related field or with 30 Ph.D. units in architecture or any related field.

c. Must be a holder of Master's degree in architecture or any related field.

d. Must be a holder of a Bachelor of Science degree in architecture.

e. Must have ten (10) years experience in professional practice with at least two (2) years teaching experience and 2 years of satisfactory administrative experience.

f. Must have proven exceptional leadership quality and active involvement in the furtherance of the profession and exemplary service to the community.

g. Must possess the highest integrity and honesty, must command respect and confidence and must adhere to the highest standards of ethical and moral conduct.

14.1.2 Teaching load

The assignment of the teaching load per term of the dean shall be an internal policy of the institution provided it does not exceed fifty percent (50%) of the regular teaching load of the full-time faculty.

14.1.3 Duties

a. Assists in the formulation of school/ university policies, curriculum development and offerings.
b. Initiates and institutes faculty and staff development programs.

c. Evaluates and recommends changes in the employment status of academic personnel such as promotion, retention, termination and disciplinary actions.
d. Prepares and assigns teaching load of faculty members.
e. Prescribes textbook adoption, and initiates college activities.
f. Plans curriculum development programs with the assistance of qualified faculty members.
g. Institutes a defined program of supervision aimed at upgrading the quality of instruction and other administrative support services.
h. Prepares and manages budget and finances.
i. Initiates programs in research and extension services.
j. Exercises overall supervision of activities of all academic personnel of the college.
k. Enforces the school rules and laws affecting education and the procedure, policies, rules and regulation promulgated by the Commission on Higher Education.
l. Initiates foreign and local linkages.

14.2 Vice/Assistant Deans/ Head of the Institution/Program

A Vice / Assistant Dean / Head shall be employed whenever his/her services may be required to support the administrative functions of the dean/head.

14.2.1 General Qualifications

Must be holder of a Master's degree in architecture or any architecture-related course with a minimum of five (5) years experience in professional practice.

14.2.2 Teaching load

The teaching load of the Vice/Assistant Dean/Head shall be an internal policy of the institution but shall not exceed seventy-five percent (75%) of the regular teaching load of the full-time faculty.

14.2.3 Duties of Vice/ Assistant Dean/Head.

The duties, functions and responsibilities of the vice/ assistant dean/ head shall be in accordance with the instructions of the dean/ head of the institution.

14.3 Support Services

14.3.1 Administrative. To handle correspondence and general office work, there shall be at least one (1) secretary for the office of the dean and clerical assistance whenever applicable and necessary.

14.3.2 Faculty. The general faculty may request for clerical assistance whenever necessary and/ or the services of student assistant may also be allowed for this purpose.

Section 15. Faculty

15.1 General Faculty

The architectural institution shall have an established procedure for recruitment of new faculty members which shall involve the administration and qualified members of the staff and faculty.

15.1.1 Qualifications

a. Academic Preparation. - A qualified faculty member shall have earned a Bachelor of Science degree in Architecture and Master's Degree in Architecture or in any architecture-related field.
b. Professional Preparation. - A qualified member shall be a registered architect by the Professional Regulation Commission (PRC) and have acquired three (3) years experience in professional practice.
c. Involvement in Associations. - A qualified faculty member shall be an active member of a professional architectural organization duly accredited by the Professional Regulation Commission (PRC) and have proven exemplary participation in convention, seminars, education pursuits, leadership and professional enrichment training.

15.1.2 Duties

It shall be the policy of the architectural institution to require its faculty to:

a. Comply with the prescribed syllabus for each course which shall be issued to the students at the beginning of the term;
b. Initiate enhancement in the prescribed syllabi;
c. Use innovative instructional materials and facilities such as computer and audiovisual resources for effective teaching;
d. Participate in committee, faculty /departments and college meetings;
e. Administer regular students' performance evaluation and graded requirements and shall be returned to the students within two (2) weeks from the submission day;
f. Follow the established grading system, which should be announced and explained to students at the beginning of each course;
g. Perform additional functions as may be assigned by the dean/head.

15.1.3 Teaching Load. The teaching load and responsibility of each faculty member shall be limited only within the area of his/her specific training and /or professional experience.

15.1.4 Composition. Within three years upon the issuance of this memorandum order, fifty percent (50%) of the academic staff shall have attained a Master's degree in architecture or in any architecture-related field.

15.1.5 Evaluation of Faculty Performance

a. It shall be the responsibility of the administration of each architectural institution to adopt a definite set of procedures for improving the classroom performance of its faculty members.

b. Faculty evaluation shall cover peers, students, and Dean's evaluation rating regularly conducted at least once a year or as prescribed by the internal policy of the institution.

c. Faculty members shall be evaluated by a set of criteria developed by the HEI.

15.1.6 Faculty Substitutes. Each architectural institution should have a policy of faculty substitution.

15.2 Full-time Faculty

A full time faculty member shall carry the regular teaching load as prescribed by the internal policy of the respective institution.

15.2.1 Minimum Academic Qualification

Each full-time faculty member shall:

a. have earned a Master's degree in Architecture or in architecture related course. and

b. Preferably earned a minimum aggregate attendance of (40) hours in three (3) years from professional development seminars undertaken by professional architectural organizations duly accredited by the Professional Regulation Commission.

15.2.2 Teaching Load. The regular teaching load per term of a full-time faculty member shall not exceed twenty-four (24) units.

15.3 Part-time Faculty

15.3.1 Academic Qualification

Preferably, each part-time member have shall earned a Master's degree in architecture or in any architecture related course and must be in active architecture practice professional practice.

15.3.2 Teaching Load

A part-time faculty member shall have a maximum teaching load per term as prescribed in the internal policy of the institution.

Section 16. Staff Development

Each administrator and full-time architecture faculty member shall be encouraged to participate in a school-approved program of professional development.

16.1 Leave of Absence. A set of policy and procedures permitting every full-time architecture faculty member a leave of absence for professional development with or without pay, at the discretion of the administration, and a provision to ensure that the faculty shall be returned to his/her regular position at the end of the leave period. This provision shall be published or defined in the school rules.

16.2 Assistance. There shall be an announced program of the architectural institution on the basis of its financial resources, for full-time faculty members to pursue advanced degrees or undertake graduate studies and continuing education programs, including attendance to seminars, conventions, workshops, etc.

16.3 Contractual terms. A full-time faculty member granted either a paid or unpaid leave of absence or provided assistance by the school in pursuit of graduate studies shall be governed by contract, by and between the school and the faculty member concerned.

Section 17. Academic Functions

Faculty shall be expected to contribute in the implementation of the effective performance of the following academic institutional functions:

17.1 Instruction

15.1.1 Classroom / studio lectures and supervision activities

15.1.2. Out-of-classroom consultation and supervision on school-based activities

17.2 Research

15.2.1 Architectural and Scientific Researches – published and unpublished Works

15.2.2 Built-Creative Works – documented projects undertaken and completed in relation to professional practice and experience in architectural designing, planning and building of structures (and as defined in the General practice of architecture). For performance evaluation purposes, this may be equivalent to a referred and/or published academic research output.

17.3 Extension Services

17.3.1 Socio-civic responsiveness – participation to socio-civic Groups

a. Membership and active participation to socio-civic groups
b. Initiate and supervise community projects
c. Active participation with the accredited professional organization and attendance to their conventions, conferences, seminars, and other related activities either as speaker or delegate

17.3.2 Continuing Professional Development

a. Formal – attendance and completion of degree courses in Architecture and/or other related field
b. Non-formal – attendance and active participation to local and international conferences and seminars

Section 18. Library

Library personnel, facilities and holdings should conform to existing CHED requirements for libraries which are embodied in a separate CHED issuance. The library must maintain a collection of updated and appropriate/suitable textbooks and references used for core courses in the curriculum. Library resources should complement curriculum delivery to optimize the achievement of the program outcomes for the BS Architecture program.

Section 19. Studio/Laboratory and Physical Facilities

19.1 General Standards.

19.1.1 Area. The size of the school/college of architecture should be adequate to meet the needs of its present population and future expansion.

Adherence to Codes. Unless otherwise stated, the physical plan of the architectural institution shall conform to the National Building Code and all other applicable codes and ordinances.

19.1.2 Health and Safety

a. All classrooms, lecture rooms, studios and laboratories in the architectural institution shall be clean and properly maintained to meet public health and safety regulations.

b. Physical education and recreational areas shall conform with all rules and regulations pertaining to safety and suitability.

c. Actual occupancy load of instructional rooms shall be properly observed and maintained.

d. All stairways/ corridors shall be free of obstruction. All stairways shall not be used for storage.

e. There shall be a working fire alarm system and fire fighting system.

f. Each instructional space shall be easily evacuated by all of its occupants within sixty (60) seconds. All external and laboratory doors shall open outward.

19.1.3 Acoustics. The sound levels inside the school facility shall generally conform with standard building practices, as follows:

Maximum Sound Level in decibels (dB)	Use
50	Classrooms
80	Laboratories
80	Design Studios
56	Offices
42	Library

19.1.4 Ventilation. The classrooms, libraries, laboratories, and offices shall conform to the existing code.

19.1.5 Lighting. Illumination levels inside the school shall be adequate and shall conform to the existing code.

19.1.6 Capacities. The classroom and laboratory facilities of the school/college shall conform with the following requirements:

Net Ratio	Facility
1 sqm per student	Lecture room
2 sqm per student	Studio/ Design facilities

The classroom standard shall apply to instructional portions of laboratories and the laboratory standard shall apply to experimental areas only (exclusive of space occupied by equipment, laboratory benches and classroom areas in the laboratories).

19.1.7 Electrical Services. The laboratory and non-laboratory instructional space of the institution shall be provided with an average of ten (10) watts / square meter of electrical power.

19.1.8 Water Supply. The Laboratory and non-laboratory instructional space of the institution shall be provided with adequate potable water supply in accordance with the national building code.

19.1.9 Custodial Support. Adequate custodial support services should be provided.

Section 20. Instructional Space

20.1 Types

20.1.1 The architectural institution shall provide a variety of spaces, which can accommodate tutorial sessions as follows:

a. Audio-Visual
b. Lecture/Seminar rooms
c. Consultation rooms

20.1.2 The instructional spaces should be marked for specific purposes.

20.2 Facilities. All instructional spaces for lecture, recitation, demonstration or tutorial purposes shall be provided with at least:

20.2.1 One (1) lecture board which shall extend at least 80% of the length of the front wall;

20.2.2 One (1) functioning dual electric outlet;

20.2.3 One (1) comfortable seat with back support for each student; and

20.2.4. One (1) designated place for posting of bulletins and announcement.

Section 21. Laboratory Instructions

21.1 Laboratory Requirements. In the absence of the architecture laboratories, architecture institutions shall have access to the following laboratories:

20.1.1 Material Testing Laboratory

20.1.2 Multi-purpose Laboratory e.g. scale modeling, utilities and building technology

20.1.3 Computer Laboratory

21.2 Design Studio shall have facilities to handle/ accommodate lecture, drafting and modeling

21.3 Student-Faculty Ratio - shall not exceed 40:1

21.4 Technical Personnel. There shall be one full-time laboratory technician or assistant per laboratory.

"Full-time" laboratory technicians means at least six (6) hours of work for any individual laboratory, plus such other additional hours, as that laboratory may require in actual use.

21.5 Equipment Requirement. To enhance the learning process of the students ,the school shall provide sufficient functional equipment, apparatus, supplies, tools and other materials inside the architecture laboratories, in order to achieve the following objectives:

21.5.1. To allow every student to perform the entire basic laboratory exercises.

21.5.2. To maintain a situation wherein no laboratory student work group shall exceed five (5) students working on the same laboratory equipment at the same time.

21.6 Maintenance of Equipment

21.6.1 Each school/college of architecture shall have an announced program for the regular preventive maintenance, repair and calibration of laboratory equipment.

21.6.2 The said program shall have an adequate annual allocation in an amount to be determined by the school concerned.

21.6.3 The school/college of architecture shall maintain a systematic record or repairs and expenditures incurred.

21.6.4 The school/college of architecture shall make available additional funds necessary for emergency repairs of essential equipment to ensure the continuing operation of the instructional program of the laboratories and design studios.

21.7 Modernization of Equipment. Each school/college architecture shall have a program for the continuing modernization and upgrading of its instructional laboratories, facilities and equipment. The said program shall have an adequate annual allocation in accordance with the financial capability of the school.

21.8 Inventory of Equipment. Each architectural institution shall maintain inventories or laboratory equipment, which shall be updated annually. The inventory shall contain the following information:

a) Name of the item
b) Quantity on hand
c) Operational status (operational, not operational, under repair, unrepairable);
d) Year of purchase; if known, and
e) Original purchase price, if known.

21.9 Laboratory Safety. Each architectural institution shall have a program on safety which shall include the following components and/or requirements:

21.9.1 Annual training program in laboratory safety for both the students and staff using or working in the laboratories.

21.9.2. Provisions for fire extinguisher of proper classification as required by the Fire Code which shall be commercially inspected and recharged;

21.9.3. Provision for evacuation drills at least once per year to train students and staff in fire and earthquake evacuation procedures.

21.9.4. Provision for specific warning signs specifically in laboratories where chemical, electrical or radiation experiments are performed.

21.9.5. Posting of safety rules and regulations and evacuation procedures in conspicuous places.

21.10 Storage. There shall be adequate storage room in the school/college of architecture to stow all equipment, apparatus and supplies not in use.

Section 22. Office Space

22.1 The school/college of architecture shall provide adequate office space for the administration of the architecture program.

22.2 The school/college of architecture shall provide and maintain Faculty Conference, Study and Consultation rooms.

Section 23. Audiovisual Facilities

23.1 Personnel

23.1.1. There shall be one full-time audiovisual technician or assistant for maintenance and distribution of audiovisual Electro-mechanical equipment or fraction thereof. Electro-mechanical equipment includes projector, audio-video players, amplifiers, TV monitors and similar major audio-visual equipment items.

23.1.2. There shall be one full-time audiovisual technician or assistant for audiovisual production and faculty assistance for every 120 architecture faculty member or fraction thereof.

23.1.3. "Full-time" for audiovisual means that the required number of audiovisual technicians or assistants are present at all times when classes are being conducted on campus.

23.2 Equipment. The school/college of architecture shall have at least one of each type of the following AV equipment:

23.2.1 Projection Screens;

23.2.2 Video-tape / Digital Players with television monitor;

23.2.3 LCD multi-media projector/Laptop computer;

23.2.4 Replacement Bulb Stock and

23.2.5 Copying Machine

23.3 Supplies. The school administration shall provide architectural faculty members with materials for the production of visual aids. This requirement should be a line item in the school budget.

23.4 Maintenance. All audiovisual equipment shall be maintained in good working condition or shall be replaced if beyond repair.

23.5 Staff Training. The school administration shall provide for all architecture faculty members at least an annual training program in the use of audiovisual equipment and in the production of sample audiovisual instruction materials.

23.6 Storage and Cataloguing. All audiovisual materials shall be stored, catalogued and classified.

Section 24. Student Services

Each school/college of architecture shall provide and maintain the following student services programs:

24.1 Career Guidance and Testing Program;

24.2 Program of Students Admission and Retention;

24.3 Medical and Dental Care (diagnostic, first-aid, preventive) program;

24.4 Employment Information Programs; and

24.5 Financial Assistance/ Educational Loans and Scholarship Programs.

Section 25. Guidance

The guidance program shall involve both initial and continuing evaluation of students' aptitude for architecture education, which may be conducted within the institution's overall guidance program. This should include the following:

25.1 Students' orientation program;

25.2 Placement testing;

25.3 Psychological counseling; and

25.4 Career choice assistance.

Section 26. On the Job Training Program

The school/college of architecture shall have an active and organized program of on the job diversified training for its students which shall include:

26.1 Assistance in organizing student employer interviews;

26.2 Maintenance of a job-available card file with and index of potential local employers;

26.3 Willing assistance to employers; and rapid transfer of students' academic transcripts to speed the employment process.

Section 27. Co-curricular Activities

The school/college of architecture shall have student co-curricular architecture activities directed towards individual development and entrance into profession. Participation of students in the activities of the professional organization of architects accredited by the Professional Regulation Commission shall highly be encouraged.

Section 28. Community Services

The administration of each school/college of architecture shall maintain close relations with local industries, professional organization and the general public for recruitment and placement of graduates as well as providing educational services to these groups.

Section 29. Publications

29.1 Course-Catalogue

The administration of each school/college of architecture shall publish a college course catalogue, which shall contain information that would fully advise the public of its policies, programs and procedures. Such a catalogue shall be updated at least once every five years.

29.2 Class Schedule

The school/college of architecture shall publish the schedule of classes for the information of the students and faculty prior to the enrolment period of each semester.

29.3 Staff Handbook

The school/college of architecture shall provide all professional staff members with a handbook updated at least once every five (5) years containing the following:

29.3.1 Employment requirements;

29.3.2 Employment benefits (such as salary, rank, fringe benefits, etc.)-

29.3.3 Classrooms and laboratory teaching procedures and practice;

29.3.4 Available teaching resources;

29.3.5 Textbook selection procedures;

29.3.6 Procurement policies and procedures;

29.3.7 Promotion policies; and

29.3.8 Evaluation policies and instruments.

29.4 Student Handbook

The administration of each school/college of architecture shall provide all students with a student handbook updated at least once every five (5) years containing the school policies and regulations pertaining to all students enrolled in architecture courses.

29.5 Laboratory Manuals

The institution shall have printed laboratory manuals available for loan to, or purchase by, all students in all architecture laboratory courses.

29.6 Faculty manual

The administration of each school/college of architecture shall publish a faculty manual updated at least once every five years and a current directory or faculty roster.

29.7 Budget

The school budget shall include allocation for research, faculty development, and extension services in addition to the usual expenditures like equipment, supplies, maintenance and repair.

29.8 Procurement

An established procedure for procuring new laboratory equipment, consumable supplies and teaching materials shall be published, distributed to faculty members and to be followed by all concerned.

29.9 Organization Structure

There shall be a published organizational structure which specifies the lines of authority and responsibilities among administrative personnel.

29.10 Policies and Regulations

Each architecture faculty member shall be provided with school policies and regulations update at least once every five (5) years.

29.11 Long-Range Plan

There shall be a written long-range development plan for the school/college of architecture. Provided, however, that its implementation and use shall be dependent on the decision of the governing board of the school.

Section 30. Student Records

30.1 Enrolment

A record system of students' enrolments for all lectures, studio and design courses shall be maintained by the Registrar's office and shall be made accessible to the college.

30.2 Student Profile

30.2.1 A permanent database of students shall include:

a. Personal information
b. Grades
c. Achievement/ delinquency records

30.3 Board Examination Records

An updated record of the school's examinees and results of the board examination for architects administered by the Board of Architects of the Professional Regulation Commission shall be maintained by the institution.

Section 31. Academic Standards

31.1 Admission

The college shall require all applicants for admission to pass an aptitude & skill entrance examinations.

31.2 Residency and Unit Requirements

As a general rule, no degree shall be conferred upon a student unless he/she has taken the last curriculum year in the college which is to confer the degree and has completed a minimum of thirty percent (30%) of the total academic units of the program in the same college, or subject to the existing admission policies of the concerned institution.

As a general rule, a student shall be allowed to carry a maximum load as prescribed in the curriculum each term. However, graduating students may be allowed to carry additional units in excess of the requirement subject to the approval of the Dean.

A student shall be permitted to take a subject only after passing its pre-requisite subject(s).

A student shall be given a grade of Incomplete for non-compliance of the requirements of a subject. An incomplete grade shall not be given an academic credit and shall be completed within a period specified by the school but not to exceed one (1) year, otherwise the incomplete grade automatically becomes a failing grade.

31.3 Graduation

Each student shall satisfy all requirements for graduation as provided by the institution and CHED rules and standards before being conferred a degree in architecture

ARTICLE VII
COMPLIANCE OF HEIs

Section 32. Requirements for New Program or for Transformation of Existing programs to OBE Framework

Using the CHED Implementation Handbook for OBE and ISA as reference, an HEI shall develop the following items which will be submitted to CHED when they apply for a permit for a new program:

Section 33. The complete set of program outcomes, including its proposed additional program outcomes.

Section 34. Its proposed **curriculum** and its justification including a curriculum map.

Section 35. Proposed **performance indicators** for each outcome. Proposed measurement system for the level of attainment of each indicator.

Section 36. Proposed **outcomes-based syllabus** for each course.

Section 37. Proposed system of program assessment and evaluation.

Section 38. Proposed system of program **Continuous Quality Improvement (CQI)**.

For existing programs, the CHED shall conduct regular monitoring and evaluation on the compliance of HEIs to this PSG using an outcomes-based assessment instrument.

ARTICLE VIII
TRANSITORY, REPEALING and EFFECTIVITY PROVISIONS

Section 33. Transitory Provision

All private HEIs, state universities and colleges (SUCs) and local universities and colleges (LUCs) with existing authorization to operate the Bachelor of Science in Architecture program are hereby given a period of three (3) years from the effectivity thereof to fully comply with all the requirements in this CMO. However, the prescribed minimum curricular requirements in this CMO shall be implemented starting Academic Year 2018-2019.

Section 34. Repealing Clause

Prior administrative issuances contrary to or inconsistent with any of the provisions herein are deemed automatically repealed, rescinded and/or modified accordingly.

Section 35. Effectivity Clause

This CMO shall take effect fifteen (15) days after its publication in the Official Gazette, or in a newspapers of national circulation. This CMO shall be implemented beginning Academic Year 2018-19.

ARTICLE IX
SANCTIONS

Any HEI found violating the provisions of this CMO shall be subjected to the appropriate criminal and administrative proceeding, including the imposition of sanctions, but not limited to, the withdrawal or revocation of the authority to operate the educational program, phase-out or termination of the program, recommendation for the withdrawal of accreditation, and closure of the HEI.

Quezon City, Philippines July 19, 2017.

For the Commission:

PATRICIA B. LICUANAN, Ph.D.
Chairperson

ANNEXES:
Annex A – Definition of Terms
Annex B – Curriculum Map
Annex C – Sample Syllabi

ANNEX A
Definition of Terms

OUTCOMES-BASED EDUCATION (OBE)

1. **COMPETENCY** is a set of related knowledge, skills and attitudes required to successfully perform a task that supports the desired architecture program outcomes through a course or series of courses.
2. **COURSE OUTCOMES** are knowledge, skills and attitudes all learners are expected to demonstrate at th e end of a course.
3. **INSTITUTIONAL ASSESSMENT** is the measure of the institution's performance in achieving set outcomes in order to provide guidance, oversight and coordination of the academic assessment and institutional processes.
4. **LEARNING OUTCOMES** are the results of specific lessons supporting the course outcomes in architecture.
5. **OUTCOMES-BASED ASSESSMENT** is the measure of students' demonstration of their learning based on explicit criteria for assessing each outcome.
6. **OUTCOMES-BASED EDUCATION** is an approach that focuses on the educational system in order to organize what is essential for all learners to know, perform, and value to achieve a desired level of competence at the time of completion of the architectural program.
7. **OUTCOMES-BASED TEACHING AND LEARNING** is the constructive alignment of intended learning outcomes with essential content, appropriate learner – centred activities and outcomes-based assessment.
8. **PROGRAM ASSESSMENT** is the diagnostic measure of the effectiveness of the outcomes-based architectural program. This shall be performed while the program is ongoing. C/O TCAR
9. **PROGRAM EVALUATION** is the determination of the effectiveness of the outcomes-based architectural program using the Program Assessment as basis for improvement. This is done upon completion of the program.
10. **PROGRAM OUTCOMES** are the knowledge, skills, and attitude all learners are expected to demonstrate at the time of completion of the architectural program

ARCHITECTURE

A. **Integrated Accredited Professional Organization of Architects (IAPOA) which is the United Architects of the Philippines (UAP.)** The official national organization of all architects of the Philippines, accredited by the Professional Regulation Commission, in which all registered Filipino architects shall be members.

B. **Architect.** A person professionally and academically qualified, registered and licensed with a certificate of registration and a valid professional identification card issued by the Board of Architecture of the Professional Regulation Commission, and who is responsible for advocating the fair and sustainable development, welfare, and cultural expression of society's habitat in terms of space, forms, and historical context.

C. **Architectural education.** The training and development of the students' proficiency on the theories, practices and techniques of the architectural profession in accordance with the scope of the practice of architecture as provided for in Republic Act No. 9266, and its implementing rules and regulations.

D. **Architectural firm**. A sole proprietorship, a partnership or a corporation registered to practice architecture with the Department of Trade and Industry, and/or Securities and Exchange Commission and then with the Board of Architecture and Professional Regulations Commission.

E. **Architectural Institutions.** A department, school or college that offers programs in architectural education duly accredited by the Commission on Higher Education.

F. **Architecture.** The art, science, and profession of planning, designing and constructing buildings in their totality taking into account their environment, in accordance with the principles of utility, strength and beauty.

G. **Architecture related programs.** Courses or fields of study related to architecture such as interior design, landscape architecture, urban design, urban planning, regional planning, environmental planning, housing, real estate development, educational management, business management, project management, construction management and technology, building administration and maintenance, engineering, architectural research, as embodied in RA 9266 including its implementing rules and regulations and the Architects' National code.

H. **Architects' National Code.** Code of ethical conduct and the standards of practice in the architectural profession to include all codes of professional practice as approved by the Board of Architecture of the Professional Regulation Commission.

I. **Author.** The signing architect responsible for the preparation of a set of plans and specifications whether made by him/her personally or under his/her immediate supervision.

J. **Board.** The Board of Architecture of the Professional Regulation Commission.

K. **College.** An academic institution offering a Bachelor of Science in Architecture program; may also refer to an institute, school or department

L. **Institutions.** A university with a Bachelor of Science program in Architecture.

M. **Commission**. The Commission on Higher Education of the Republic of the Philippines.

N. **Contract Documents.** A final set of plan and specifications for a building that normally include: architectural design: vicinity map, site plans, floor plans, elevations; sections, perspective/isometric presentations, foundation plans, roof plans, roof and floor framing plans and their details; structural, electrical, mechanical and plumbing design, specifications and related calculation as appropriate in accordance with the Building Code and all other documents required to obtain a building permit.

O. **General Practice of Architecture.** The act of planning and architectural designing, structural conceptualization, specifying, supervising and giving general administration and responsible direction to the erection, enlargement or alterations of buildings and building environments and architectural design in engineering structures or any part thereof; the scientific, aesthetic, and orderly coordination of all the processes which enter into the production of a complete building or structure, performed through the medium of unbiased preliminary studies of plans, consultations, specifications, conferences, evaluations,

investigations, contract documents and oral advice and directions regardless of whether the persons engaged in such practice are residents of the Philippines or have their principal office or place of business in this country or another territory, and regardless whether such persons are performing one or all of these duties, or whether such duties are performed in person or as the directing head of an office or organization performing them.

P. **Implementing rules and regulations.** All rules and regulations formulated by the Board of Architecture, approved by the Professional Regulation Commission and published in the Official Gazette which will implement the provisions and specifications of RA 9266.

Q. **Professional practice.** The activities performed by a registered architect with regards to his / her profession, as embodied in RA 9266 including its implementing rules and regulations.

R. **Republic Act No.9266.** The Act regulating the practice of architecture in the Philippines.

S. **Scope of practice of architecture.** The provision of professional services in connection with the site, physical planning and the design, construction, enlargement, conservation, renovation, remodeling, restoration or alteration of a building or a group of buildings. Services may include, but are not limited to:

(a) Architectural planning and designing, architectural designing, pre-design services and structural conceptualization;

(b) Consultation, consultancy, giving oral or written advice and directions, conferences, evaluations, investigations, quantity surveys, appraisals and adjustments, architectural and operational planning, site analysis and other pre-design services;

(c) Architectural schematic design, design development, contract documents and construction phases including professional consultancies,

(d) Preparation of preliminary, technical, economic and financial feasibility studies of plans, models and project promotional services;

(e) Preparation of architectural plans, specifications, bills of materials, cost estimates, general conditions and bidding documents;

(f) Construction and project management of building and its immediate environs, giving general management, administration, supervision, coordination and responsible direction or the planning, architectural planning and designing, construction, reconstruction, erection, enlargement, or demolition, renovation, repair, orderly removal, remodeling, alteration, preservation or restoration of buildings or structures or complex buildings, including all their components, sites and environs intended for private or public use;

(g) The planning, architectural lay-outing and utilization of spaces within and surrounding such buildings or structures, including housing design and community architecture, architectural interiors and space planning, architectural detailing, architectural lighting, acoustics, architectural lay-outing of mechanical, electrical, electronic, sanitary, plumbing, communications and other utility systems, equipment and fixtures;

(h) Building programming, building administration, construction arbitration and architectural conservation and restoration;

(i) All works which relate to the scientific, aesthetic, and orderly coordination of all works and branches of work systems and processes necessary for the production of a complete building or structure, whether for public or private use, in order to enhance and safeguard life, health and property and the promotion and enrichment of the quality of life, the architectural design of engineering structures or any part thereof; and

(j) All other works, projects and activities, which require the professional competence of an architect, including design-build services, teaching of architectural subjects and architectural computer-aided design (CAD).

T. Structural design/Structural Conceptualization. The act of conceiving, choosing and developing the type, disposition, arrangement and proportioning of the structural elements of an architectural work giving due consideration to safety, functionality and aesthetics.

Annex B
Curriculum Mapping

PROGRAM CURRICULUM MAP												
List of Required Courses	**Program Outcomes Code**											
I. TECHNICAL COURSES	**1.a**	**1.b**	**1.c**	**1.d**	**2.a**	**2.b**	**2.c**	**2.d**	**2.e**	**2.f**	**2.g**	**2.h**
Mathematics												
Solid Mensuration												
Differential and Integral Calculus												
Natural/Physical Sciences												
Science, Environment and Society												
Basic Engineering Sciences	**1.a**	**1.b**	**1.c**	**1.d**	**2.a**	**2.b**	**2.c**	**2.d**	**2.e**	**2.f**	**2.g**	**2.h**
Statics of Rigid Bodies												
Strength of Materials												
Theory of Structures						I						
Steel and Timber Design						P						
Architectural Structures						P						
Surveying						P						
Allied Courses	**1.a**	**1.b**	**1.c**	**1.d**	**2.a**	**2.b**	**2.c**	**2.d**	**2.e**	**2.f**	**2.g**	**2.h**
Architectural Visual Communications 1- Graphics 1												
Architectural Visual Communications 2- Visual Techniques 1												
Architectural Visual Communications 3 - Graphics 2												
Architectural Visual Communications 4 - Visual Techniques 2												
Architectural Visual Communications 5 - Visual Techniques 3											I	
Professional Courses	**1.a**	**1.b**	**1.c**	**1.d**	**2.a**	**2.b**	**2.c**	**2.d**	**2.e**	**2.f**	**2.g**	**2.h**
Architectural Design 1 - Introduction to Design	I			I	I			P				
Architectural Design 2-Creative Design Fundamentals	P			P	P	P		P				
Architectural Design 3 – Creative Design in Architectural Interiors	P			P	P	P		P				
Architectural Design 4 - Space Planning 1	P			P	P	P		P				
Architectural Design 5 - Space Planning 2	P			P	P	P		P				
Architectural Design 6 - Site Development Planning and Landscaping	P			P	P	P		P				
Architectural Design 7 - Community Architecture and Urban Design	P			P	P	P		P				
Architectural Design 8 - Design of Complex Structures	P			P	P	P		P				

List of Required Courses	Program Outcomes Code											
Architectural Design 9 - Thesis Research Writing	P	D		P	P	P		P				
Architectural Design 10-Thesis Research Application	D			D	D	P		P	P	D		
Theory of Architecture 1					I							
Theory of Architecture 2				P	I							
Architectural Interiors	I				I							
Building Technology 1 – Building Materials												P
Building Technology 2- Construction Drawings in Wood, Steel and Concrete (1 Storey Building)			P	P	P	P	P	P				P
Building Technology 3 - Construction Drawings in Wood, Steel and Concrete (2 Storey Building)			P	P	P	P	P	P				P
Building Technology 4 - Specification Writing and Quantity Surveying		P		P	P		P	P				P
Building Technology 5 - Alternative Building Construction Systems	P					P	P	P				P
Building Utilities 1 (BU 1) - Plumbing and Sanitary Systems					P	P	P	P				P
Building Utilities 2 (BU 2) – Electrical, Electronics and Mechanical Systems					P	P	P	P				P
Building Utilities 3 (BU 3) - Acoustics and Lighting Systems					P	P	P	P				P
History of Architecture 1					P							
History of Architecture 2					P							
History of Architecture 3					P							
History of Architecture 4					P							
Professional Practice 1 (Laws Affecting the Practice of Architecture)				P	P		I					
Professional Practice 2 (Administering the Regular Services of the Architecture)			P	P		I	P	P			P	P
Professional Practice 3 (Global Practice for the 21st Century)	P		P	P		P	P	P			P	
Planning 1 - Site Planning and Landscape Architecture				P	P	P	P	P				
Planning 2 - Fundamentals of Urban Design & Comm. Arch				P	P	P	P	P				

List of Required Courses	Program Outcomes Code											
Planning 3 - Introduction to Urban and Regional Planning				P	P	P		P				
Computer-Aided Design & Drafting for Architecture										P		
Building Information Modelling										P		
Research Methods for Architecture		P		P					I			
Tropical Design					P			P				
Housing				P			P	P				
Business Mgt & Application for Architecture 1												
Business Mgt & Application for Architecture 2												
Specialization Courses	**1.a**	**1.b**	**1.c**	**1.d**	**2.a**	**2.b**	**2.c**	**2.d**	**2.e**	**2.f**	**2.g**	**2.h**
Specialization 1												
Specialization 2												
Specialization 3	P		P									
Non-Technical Courses	**1.a**	**1.b**	**1.c**	**1.d**	**2.a**	**2.b**	**2.c**	**2.d**	**2.e**	**2.f**	**2.g**	**2.h**
Understanding the Self				I								
Readings in Philippine History												
Mathematics in the Modern World												
The Contemporary World												
Ethics												
Science,Technology, & Society												
GE Elective												
GE Elective												
GE Elective												
Life. Works of Jose Rizal												
P.E. 1,2.3,4												
NSTP 1,2												

GRAND TOTAL **205 units**

ARTICLE C
SAMPLE SYLLBUS

Course Code	**AAA 222**	
Course Title	**PLANNING 2 – FUNDAMENTALS OF URBAN DESIGN & COMMUNITY ARCHITECTURE**	
Credit Units	**Lecture**	**3 UNITS**
	Laboratory / Studio	**(none)**
Pre-Requite(s)	**Couse Code**	**AAA 111**
	Course Title	**PLANNING 1 – SITE PLANNING & LANDSCAPE ARCHITECTURE**
Course Description: Spatial Order, Socio –Cultural expression in the design of the exterior environment in neighborhoods, communities, towns & cities		
Course Outcomes		
Upon completion of the course, the learner will be able to: 1. acquire a sense of spatial order, scale, culture and history in handling urban design and community architecture problems; 2. develop awareness on the need for socio-cultural expression and communication in the design of specific place in towns and cities; 3. have a working knowledge of organization and behavior in the design of specific towns and cities. 4. have an awareness on the importance of community involvement/participation and co-design techniques in urban/community architecture. 5. to design the built environment in the context of ecological balance, sustainable development and conservation of cultural and historical heritage.		

COURSE CONTENT					
Week	**Hours**	**Learning Outcomes**	**Topics**	**Teaching Learning Activities**	**Assessment Tasks**
1st	3	At the end of the lesson, the learner will be able to: 1.know the Class Policy of the Class to be followed 2.appreciate Urban Design & Community Architecture	1. Personality Introduction/ Class Policy 2. Introduction to Urban Design & Community Architecture	1.Lecture 2.Class Discussion	1.Class Diagnostic Assessment
2nd-3rd	4.5	1.Use socio-cultural elements to urban design 2. Relate historical background to Community Architecture	1. Socio-Cultural Basis of Design of Communities 2. Historical Background: Aesthetics/ Community Architecture	1.Lecture 2.Class Discussion	1. Quiz
3rd	1.5	1.Distinguish & use Community Identity & means of Orientation	1. Orientation & Identity in Community Architecture	1.Lecture 2.Class Discussion	1. Quiz
4th-5th	4	1.Identify & design Sense of Place & Time	1. Creating and Identifying the Sense of Place & Sense of Time	1.Lecture 2.Class Discussion	1. Reports
5th-6th	4	1.distinguish & apply signs & symbols in Urban Design 2.Categorize & apply the Elements of Urban Design	1. Signs and Symbols in Urban Design 2. Elements of Urban Design	1. Lecture 2. PPT Presentation 3. Class Discussions 4. Field work	1. Quiz 2. Drawing Exercises 3. Reports
6th	1	**PRELIM EXAMINATION**			

COURSE CONTENT					
Week	**Hours**	**Learning Outcomes**	**Topics**	**Teaching Learning Activities**	**Assessment Tasks**
7th-8th	4	At the end of the lesson, the learner will be able to: 1.Distinguish & compare the different images of cities 2.Categories environmental responses to urban design	1.The Image of the City 2.Responsive Environment	1. Lecture 2. PPT Presentation 3.Class Discussions	1. Quiz 2. Drawing Exercises
8th-9th	5	1.Comprehend Urban Spaces 2.Analyze the system used in urban design 3.Recognize & distinguish the different urban patterns 4.Illusrate & make a presentation of existing urban places	1.Space in Urban Design, Urban Aesthetics, Urban Pattern 2.Documenting the City: The system of design and process of presentation	1. Lecture 2. PPT Presentation 3.Class Discussions	1. Reports 2. Drawing Exercises 3. Quiz
10th-11th	4	1.recognize, relate & apply theories, rules & processes in urban design	1.Theories, Rules, and Process in Urban Design	1. Lecture	1.Assignments
11th-12th	4	1.Identify & make laws (other legal considerations) as framework in designing urban areas	1. Legal Considerations in Urban Design	1. Lecture	1.Assignments 2.Quiz for (10th-12th Wks)
12th	1	**MIDTERM EXAMINATION**			

COURSE CONTENT					
Week	**Hours**	**Learning Outcomes**	**Topics**	**Teaching Learning Activities**	**Assessment Tasks**
13th-15th	7	At the end of the lesson, the learner will be able to: 1. Recognize, classify, & compare Special Uses in a developed environment	1.Overview of Special Uses: a. Cross-Roads Communities b. Agricultural Settlements c. Industrial Estates d. Military Camps	1. Lecture 2. PPT Presentation 3.Class Discussions 4.Field Work	1. Reports 2. Quiz

			e. Commercial Complexes f. Transportation Hubs g. Recreational Centers h. Mining Settlements i. Retirement Communities		
15th-17th	7	1.Identify the various Design Requirements of Specific Places 2.Apply these Requirements in urban design	1.Design Requirements of Specific Places in Towns & Cities. a.Cluster Housing and Planned Unit Development (PUD) b.Areas for Priority Development (APDs) / Mixed Use Development & com'l ctrs c.Industrial parks and districts d.Planning Educational Campuses e.Government Center & the Plaza Complex f. Coastal/Lakeside Community Planning g.Resort Community Design h.Parks and Open Spaces, Recreational Areas	1. Lecture 2. PPT Presentation 3.Class Discussions 4.Research	1.Assignments 2.Quiz
17th-18th	3	1.Formulate a simple design for an urban community 2.Adhere to Urban Design as a Public Policy	1.Design as a Public Policy	1. Lecture 2. Final Class Project	1.Project presentation
18th	1	**FINAL EXAMINATION**			

Course References	
Textbook	**(none)**
Other References	1.Urban Design: The American Experience – Lang, Jon 1994 2.The Image of the City – Lynch, Kevin 3.Communities within Cities – Davies, W.K.D. / Herbert, D.T. 4.Extension Space in Architecture -Ashihara 5.Design of Cities – Bacon, Edmond 6.Streets and Squares, The Green Dimension, Designing the City (1999) (4 vol.) – Burton, Hugh 7.Color in Architecture: design Methods for Building Interiors and Urban Spaces – Linton, H. 8.Urban Landscape Design - Eckbo, Garett
Grading System	TPG/TMG/TFG = (PEx35%)+(Qx20%)+(Prx20%)+(Asx10%)+(ACPx15%) MG/FG = (TPGx1/3)+(TMGx2/3) Legend: PE - Periodic Exam Q – Quizzes Pr – Projects As - Assignments ACP - Average Class Participation TPG/TMG/TFG – Tentative Prelim Grade/ Tentative Midterm Grade/ Tentative Final Grade MG/FG – Midterm Grade/ Fiinal Grade
Course Requirement/s	Quizzes Periodic Exams Class Discussions Assignments Drawing Plates Oral Reports

PREPARED BY:

<<Faculty Name>>

<<Faculty Name>>

<<Faculty Name>>

<<Faculty Name>>

REVIEWED BY:

<<Name of industry Practitioner >>

VERIFIED BY:

<<Name of Department Chair>>
Department Chair, <<Name of Department> >

RECOMM*EN*DING APPROVAL:

<<Name of Associate Dean>>
Associate Dean, <<College Initials>>

APPROVED BY:

<<Name of Associate Dean>>
Dean, <<College Initials>>

COLLEGE OF ARCHITECTURE

OBE Course Syllabus

COURSE TITLE	**ARCHITECTURAL DESIGN 7**	**COURSE CODE**	**D7**
COURSE DESCRIPTION	This course deals with the design problems giving emphasis on the importance of solving complex architectural situations, conditions and the perceptual sensitivities of man.		
NO. OF LECTURE HOURS PER WEEK	Lecture: One (1) Design Studio: Nine (9)	**CREDIT UNITS**	Five (5)
PRE-REQUISITE(S)	**SUBJECT CODE**	**DESCRIPTIVE TITLE**	
COURSE OBJECTIVES	D6	ARCHITECTURAL DESIGN 6	

This course aims:

To design and present more complex architectural form focusing on the development of architectural planning and design through proper site analysis including site orientation;

To apply the most relevant building laws and regulations in architectural presentations;

To identify and translate architectural design solutions in relation to its build environment;

To present an architectural design solution that considers the importance of the environment and ecological balance;

To utilize the methods of research in analyzing and identifying the importance of architecture in terms of site planning and development.

VALUE AIMS

The value and importance id applying lessons learned during the previous program on space manipulation through the creation of correct space relations for the purpose of comfortable and universal architecture.

Course Intended Learning Outcomes (CILOs)	**Teaching Learning Activities (TLAs)**	**Assessment Tasks (ATs)**
At the end of the course the student should be able to: LO1. Design complex architectural forms and choose an appropriate site through proper site analysis including site orientation. LO2. Design complex architectural forms focusing on structural concepts. LO3. Demonstrate the application of building laws and regulations to architectural planning and design. LO4. Develop architectural design solutions in relation to its ecology and build environment. LO5. Employ conceptual design and site planning analysis. LO6. Develop students' ability to utilize the method of research in data gathering for site selection and architectural planning and design solutions.	- Lecture/ Discussion - E-support Teaching & Learning - Esquisse -Drawing Exercises -Research -Working Drawings -Oral Presentation	-Individual / Group Project Research / Assignment -Esquisses -Major Plates / Working Drawings Production & Presentation -Major Examination

COURSE PROGRAM						
Module	**Week**	**Course Content**	**Connected LO's**	**Outcomes-Based Assessment (OBA)**	**Teaching and Learning Activities (TLA)**	**Wright to Module to ILO**
1.0	1	Course Introduction: -Brief Introduction to Creative Design -Class Requirements -Class Diagnostic Assessment				
2.0	2-6	Emphasis on Building Structures and Utilities -Major Plate No. 1	LO1, LO4, LO5, LO6	Major Plate 1 & 2; Preliminary Exam	-Lecture/ Discussion -E-Support Teaching and Learning -Esquisse -Drawing Exercises -Research -Working Drawings -Oral Presentation	20
3.0	7-11	Laws and Structural Concepts -Major Plate No. 2	LO1, LO2, LO3, LO6	Major Plate 1 & 2; Preliminary Exam	-Lecture/ Discussion -E-Support Teaching and Learning -Esquisse -Drawing Exercises -Research -Working Drawings -Oral Presentation	20
4.0	9		**Preliminary Examination**			15
5.0	12-16	Ecological Planning and Design with Nature -Major Plate No. 3	LO1, LO2, LO3, LO4, LO5, LO6,		-Lecture/ Discussion -E-Support Teaching and Learning -Esquisse	30

					-Drawing Exercises -Research -Working Drawings -Oral Presentation	
6.0	17-18	Final Evaluation	**Final Examination**			15

COURSE REQUIREMENT		
Requirements	**Grade Percentage Distribution**	**Final Grade Computation**
-Individual / Group Project Research / Assignment -Esquisses -Preliminary & Final Examination	30%	Final Grade = 0.30 [(E/R+PE+FE)/3] + 0.20 (MP1) + 0.20 (MP2) + 0.30 (MP3) Passing Grade = 75% and above Where: MP=Major Plate E/R=Esquisses/Research Works PE=Prelim Exam FE=Final Exam
Course Work: -Major Plate No. 1 -Major Plate No. 2 -Major Plate No. 3	 20% 20% 30%	

GRADING SYSTEM		
Grade	**Equivalent Grade**	**Description**
96-100	1.0	Excellent
94-95	1.25	Very Good
92-93	1.50	Very Good
89-91	1.75	Good
87-88	2.0	Good
84-86	2.25	Satisfactory
82-83	2.5	Satisfcatory
79-81	2.75	Fair
75-78	3.0	Pass
Below 75	5.0	Fail
	WF	Withdrew w/o Permission
	WP	Withdrew w/ Permission
	FA	Failure due to absences
Remarks	Maximum Allowable Absences = 10	

REFERENCES

-**Building Types: Time Savers**, Mc-Graw Hill
- **Architectural Graphics Standards**, Ramsey, C., 2000
-**The Elements of Styles**, Stephen Calloway, Mitchell Beazley Publications, 1992

Prepared by:	Verified by:	Approved by:
Faculty Member's Printed Name and Signature	Course Coordinator	Dean, College of Architecture
Date:	Date:	Date:

ARCHITECTURAL DESIGN MAJOR PLATE GRADING SHEET

Name:	Yr. & Section:	Adviser:

Major Plate Title:	Site:

PROJECT ISSUES	LESS EVIDENT (50-74%)	FAIRLY EDVIDENT (75-83)	VERY EVIDENT (84-91)	EXCEPTIONALLY EVIDENT (92-100)
ACCEPTABILITY AND SUCCESSFUL TRANSLATION OF THE DESIGN CONCEPT 10% ENCIRCLE THE APPROPRIATE GRADE ------ >	Work did not reflect any design concept/ character; the work had no conceptual basis	Design concept was expressed, although its relationship to the Design Philosophy and its translation had obvious inconsistencies	Design concept was clearly related to the Design Philosophy, Explained and translated in the work, with very minor inconsistencies	Design concept was very clearly related to the Design Philosophy, well-explained and successfully translated in the work
	5 5.5 6 6.5 7	7.5 8	8.5 9	9.5 10
SOUNDNESS OF THE SITE DE'VT PLAN: TRAFFIC CIRCULATION, SEGREGATION, ZONING OF AREAS, LANDSCAPING 15%	Work did not show any logical planning approach or strategy	There was an attempt to put the site in order but a number of incoherent solutions were committed	The site was well-planned, site constraints were solved, maximized the site potentials but have some minor flaws	The planning solution demonstrated an exemplary example of good site planning in all aspects
ENCIRCLE THE APPROPRIATE GRADE ------ >	7.5 8.0 8.5 9.0 9.5 10 10.5 11	11.5 12 12.5	13 13.5 14	14.5 15
SOUNDNESS & CREATIVITY OF THE FLOOR PLANS: IRCULATION, SEGREGATION, ZONING OF AREAS 35%	The work showed poor and unacceptable layout of floor plans	The work showed an attempt to design; spaces were logically acceptable but had violation of design standards, bldg code and other related national / local laws	The work was well-designed, coherent, followed the standards and codes but was observed to have some very minor design faults	The work was very impressive, almost faultless, exhibited fresh ideas in designing and had consistently followed the codes and standards
ENCIRCLE THE APPROPRIATE	17 18 19 20 21 22 23 24	26 26.5 27 27.5 28 28.5	30 30.5 31 31.5 32	32.5 33 33.5 34 34.5

GRADE ------ >	25	29		35
INNOVATIVE AND EFFECTIVE INTERPRETATION OF ELEVATIONS AND SECTIOND BASED ON THE DESIGN CONCEPT 20%	The work showed poor and inconsistent interpretation of elevations and sections	The work showed an attempt to design the vertical aspect; logically acceptable but had inconsistencies with the floor plans	The work was well-designed, coherent, but was observed to have some very minor design faults	The work was very impressive, almost faultless, exhibited fresh ideas in designing and had consistently followed the codes and standards
ENCIRCLE THE APPROPRIATE GRADE ------ >	10 11 12 13 14	15 15.5 16 16.5	17 17.5 18	18.5 19 19.5 20
COMPETENT TRANSLATION OF EXTERIOR AND INTERIOR PERSPECTIVES 10%	The work showed poor and inconsistent interpretation of exterior and interior perspectives	The work showed an attempt to interpret the design in 3–dimensional form but had inconsistencies with the floor plans, elevations and sections	The work was well-designed, coherent, but was observed to have some very minor design faults	The work was very impressive, almost faultless, exhibited fresh ideas in designing and rendering 3-dimensional images
ENCIRCLE THE APPROPRIATE GRADE ------ >	5 5.5 6 6.5 7	7.5 8	8.5 9	9.5 10
OVERALL CORRECTNESS OF DRAWINGS AND CREATIVITY OF PRESENTATION 10%	The work did not observe drafting standards, untidy, and did not meet basic acceptable presentation	The work met the minimum acceptable design presentation, but had a number of drafting errors	The work was commendable, neat, impressive but had some minor drafting errors	The presentation was very commendable, well-presented, very neat and had no drafting errors
ENCIRCLE THE APPROPRIATE GRADE ------ >	5 5.5 6 6.5 7	7.5 8	8.5 9	9.5 10

Adviser's Comments:

_____

_____

PROF'S SIGNATURE

SAMPLE COURSE SYLLABUS
Course Code:

Course Title: Building Information Modeling 2
Pre-requisite: Computer-Aided Design and Drafting for Architecture 2
Co-requisite: None

Credit: 1 unit / 2 units

Course Description: An advanced building information modeling for computer aided architectural rendering, modeling and animation using current software.

Student Outcomes and Relationship to Program Educational Objectives

Student Outcomes		Program Educational Objectives				
		1	2	3	4	5
(a)	to keep abreast of the developments in the field of architecture practice	✓	✓		✓	✓
(b)	the ability to effectively communicate orally and in writing using both English and Filipino	✓	✓		✓	✓
(c)	the ability to work effectively and independently in multi-disciplinary and multi-cultural teams.	✓	✓		✓	✓
(d)	A recognition of professional, social, and ethical responsibility	✓	✓	✓	✓	✓
(e)	Creation of architectural solutions by applying knowledge in history, theory, planning, building technology and utilities, structural concepts and professional practice.	✓	✓			✓
(f)	Use of concepts and principles from specialized fields and allied disciplines into various architectural problems.	✓	✓		✓	✓
(g)	Preparation of contract documents, technical reports and other legal documents used in architectural practice adhering to applicable laws, standards and regulations	✓	✓		✓	✓
(h)	Interpretation and application of relevant laws, codes, charters and standards of architecture and the built environment.	✓	✓		✓	✓
(i)	Application of research methods to address architectural problems.	✓	✓	✓	✓	✓
(j)	Use of various information and communication technology (ICT) media for architectural solutions, presentation, and techniques in design and construction.	✓	✓		✓	✓
(k)	Acquisition of entrepreneurial and business acumen relevant to architecture practice.	✓	✓		✓	✓
(l)	Involvement in the management of the construction works and building administration	✓	✓		✓	✓

Course Outcomes (COs) and Relationship to Student Outcomes

Course Outcomes After completing the course, the student must be able to:	Student Outcomes*											
	a	b	c	d	e	f	g	h	i	j	k	l
1. apply building information modeling (BIM) techniques to complete solid architectural projects			P				P			P		
2. Prepare computer-aided architectural perspective renderings	P									P		
3. Prepare computer-aided walkthroughs and animations.										P		

*** Level: I- Introduced, P- Practiced, D- Demonstrated**

Course Coverage

Week	TOPICS	TLA	AT	COURSE OUTCOMES
1	Mission and Vision of Mapua Institute of Technology Orientation and Introduction to the Course Discussion on COs, TLAs, and ATs of the course Overview on student-centered learning and eclectic approaches to be used in the course Introduction to Building Information Modeling	Lecture / Discussion demonstration / application	PL 100 – Text	CO 1
2	User Interface	lecture/ open discussion/ demonstration	PL100 Plan	CO 1
3	Conceptual Design using Massing	lecture/ demonstration / application	PL100 Elevations Sections	CO 1
4	Utilizing Components	lecture/ open discussion / application	PL100 – Perspective Walkthrough and Rendering	CO 2/ CO3
5	Detailing	lecture/ open discussion / application	PL200 – Plan Residential	CO 1

Week	TOPICS	TLA	AT	COURSE OUTCOMES
6	Rendering	lecture/ open discussion/ demonstration / application	PL200 – Elevations Residential	CO 3
7-8	Creating and Editing Walkthroughs	lecture/ open discussion/ demonstration / application	PL200 Rendering and walkthrough	CO 2 CO 3
9-10	Importing and Linking Files	lecture/ open discussion/ demonstration / application	PL300 2-storey residence PL 400 PL 500	CO 1
11	Assessment of Plates	application	PLF Summative Assessment	CO 1 CO 2 CO 3

Textbook:

Course Evaluation

Student performance will be rated based on the following:

Assessment Tasks		Weight	Minimum Average for Satisfactory Performance
CO 1	PL100	5%	75%
	PL200	10%	75%
	PL300	10%	75%
	PLF	20%	75%
CO 2	PL400	10%	75%
	PLF	10%	75%
CO 3 CO 1	PL100	5%	75%
	PL500	10%	75%
	PL600	10%	75%
	PLF	10%	75%
TOTAL		100%	75%

The final grades will correspond to the weighted average scores shown below

Average	Grade	Average	Grade
Below 60	5.00	83 – 84	2.00
75 – 76	3.00	85 – 88	1.75
77 – 79	2.75	89 – 92	1.50
79 – 80	2.50	93 – 95	1.25
81 – 83	2.25	96 – 100	1.00

Other Course Policies

Attendance:
According to CHED policy, total number of absences by the students should not be more than 20% of the total number of meetings or 9 hrs for a three-unit-course. Students incurring more than 9 hours of unexcused absences automatically gets a failing grade regardless of class standing.

Honor, Dress and Grooming Codes
All of us have been instructed on the Dress and Grooming Codes of the Institute. We have all committed to obey and sustain these codes. It will be expected in this class that each of us will honor the commitments that we have made.
For this course the Honor Code is that there will be no plagiarizing on written work and no cheating on exams. Proper citation must be given to authors whose works were used in the process of developing instructional materials and learning in this course. If a student is caught cheating on an exam, he or she will be given zero mark for the exam. If a student is caught cheating twice, the student will be referred to the Prefect of Student Affairs and be given a failing grade.
Consultation Schedule

Other References
Autodesk Revit Architecture 2013 essentials / James Vandezande, Phil Read, Eddy Krygiel.

Mastering Revit architecture 2010 / Greg Demchak, Tatjana Dzambazova, Eddy Krygiel.
Autodesk Revit architecture 2012 essentials : Autodesk official training guide / Phil

Read, Eddy Krygiel, James Vandezande.

Course Materials Made Available