APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

CURRICULUM

BACHELOR OF ARCHITECTURE

2021

CURRICULUM I TO X: B.ARCH, 2021

Every course of B. Arch Program shall be placed in one of the five categories as listed in table below:

Sl. No	Knowledge Segment	Category	Code	Credits
1	Professional Courses			**154**
1.a		Architectural Design	AD	100
1.b		Architectural Studies	AS	15
1.c		Architectural Theory	AT	39
2.	Building Science and Applied Engineering			**65**
2.a		Basic And Building Sciences	BS	28
2.b		Applied Engineering	AE	18
2.c		Building Construction	BC	19
3.	Elective Course		EC	**13**
4.	Professional Ability Enhancement Courses		PE	**26**
5.	Skill Enhancement Courses		SE	**02**
		Total Mandatory Credits		**260**

As outlined in the Regulation R 3.6 Category Code is based on the 5 knowledge segments prescribed by COA and further sub divided for better clarity.

Semester-wise credit distribution

Semester	1	2	3	4	5	6	7	8	9	10	Total
Credits	28	28	28	28	28	28	15	28	28	21	**260**

Category Description

Architectural Design Courses (AD) : Basic Design and Visual Arts, Architectural Design, Architectural Design Thesis.

Architectural Studies courses (AS) : Architectural Graphics and Drawing, Carpentry and Model Making Workshop, Site Planning and Interior Design.

Architectural Theory (AT) : Theory of Architecture, History of Architecture and Culture, Landscape Design, Specifications, Cost Estimation and Budgeting, Human Settlements Planning, Building Economics and Sociology, Urban Design, Housing.

Basic and Building Sciences Courses (BS) : Mathematics, Climate and Built Form, Building Services, Surveying and Leveling, Environmental Science for Architecture.

Applied Engineering Courses (AE) : Theory of Structures

Building Construction Courses (BC) : Building Materials and Construction Techniques, Building Materials Construction Techniques and Working Drawing.

Elective Courses (EC): Electives

Professional Ability Enhancement Courses (PE) : Internship or Practical Training, Material Study/ Critical Analysis, Research Methodology, Professional Practice, Project Management, Dissertation.

Skill Enhancement Courses (SE) : Communication Skills & Techniques

Course Code and Course Number

Each course is denoted by a unique code consisting of three alphabets followed by three numerals. For example A R L 2 0 1. The first two alphabets in the code refer to the department offering the course.

AR stands for a course in Architecture, AE stands for a course in Engineering ,MA stands for a course in Mathematics, EC stands for Elective courses in any Department, SE stands for Skill Enhancement courses in any Department etc.

Third letter stands for the nature of the course as indicated in the Table 1.

Table 1: Code for the nature of the courses

Code	Description
T	Theory based courses (other than the lecture hours, these courses can have tutorial and practical hours, L-T-S-P/D structures Lecture– Tutorial– Studio–Practical/Drawing.(e.g., 2-1-0-0, 3-0-0-1, 2-0-1-0 etc.)
S	Studio courses which are not project based
M	MOOC Courses
D	Project based courses (Design, PT, Thesis)
L	Lab/Work shop/Practical
Q	Seminar Courses

Course Number is a three digit number and the first numeral refers to the academic year in which the course is normally offered, i.e. 1, 2, 3, 4 or 5 for the Program of five year duration. Of the other two numerals, the last digit identifies whether the course is offered normally in the odd semester (odd number), even semester (even number). The middle numeral could be any digit.

SEMESTER I

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
A	ART 101	Theory of Architecture - I	AT	3-0-0-0	3	3
B	MAT 101	Mathematics	BS	3-0-0-0	3	3
C	AET 101	Theory of Structures - I	AE	2-1-0-0	3	3
S	ARD 101	Basic Design and Visual Arts	AD	0-2-8-0	10	10
T	ARS 101	Building Materials and Construction Techniques - I	BC	1-0-0-2	3	3
U	ARS 103	Architectural Graphics and	AS	1-0-0-3	4	4

		Drawing - I				
V	SEL101	Communication Skills& Techniques	SE	1-0-0-1	2	2
TOTAL					**28**	**28**

NOTE:

ARD 101- Basic Design and Visual Arts course is assigned 8 hours of studio and 2 hours of tutorial which is earmarked for contents from visual arts to be handled by fine arts faculty

ARS 101- Building Materials and Construction Techniques - I is assigned 1 hour of lecture and 2 hours for drawing and practical sessions in the construction yard

SEMESTER II

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
A	ART 102	Theory of Architecture - II	AT	3-0-0-0	3	3
B	ART 104	History of Architecture and Culture-I	AT	3-0-0-0	3	3
C	AET 102	Theory of Structures - II	AE	2-1-0-0	3	3
S	ARD 102	Architectural Design - I	AD	0-0-8-2	10	10
T	ARS 102	Building Materials and Construction Techniques- II	BC	1-0-0-2	3	3
U	ARS 104	Architectural Graphics and Drawing -II	AS	1-0-0-3	4	4
W	ARL 102	Carpentry and Model Making Workshop	AS	0-0-0-2	2	2
TOTAL					**28**	**28**

NOTE:

ARD 102 - Architectural Design - I course is assigned 8 hours of studio and 2 hours of drawing. 2 hours of drawing is earmarked for documentation of buildings both historic and contemporary.

ARS 102- Building Materials and Construction Techniques - II is assigned 1 hour of lecture and 2 hours for drawing and practical sessions in the construction yard

SEMESTER III

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
A	ART 201	Climate and Built Form - I	BS	2-0-0-2	4	4
B	ART 203	History of Architecture and Culture-II	AT	3-0-0-0	3	3
C	AET 201	Theory of Structures - III	AE	2-1-0-0	3	3
D	AET 203	Building Services - I	BS	2-0-1-0	3	3
S	ARD 201	Architectural Design - II	AD	0-0-8-2	10	10
T	ARS 201	Building Materials and Construction Techniques- III	BC	1-0-0-2	3	3
U	AEL 201	Surveying and Leveling	BS	1-0-0-1	2	2
TOTAL					**28**	**28**

NOTE:

ART 201- Climate and Built Form – I is assigned 2 hours of lecture and 2 hour of practical which is earmarked for conducting experiments in building science laboratory.

AET 203 - Building Services – I, deals with Water Supply, Plumbing and Sanitation. This course is assigned 2 hours of lecture and 1 hour of studio so that contents learnt can be applied to a design problem.

ARD 201 - Architectural Design - II course is assigned 8 hours of studio and 2 hours of practical which is earmarked for training of fundamental application of computer in design and drafting.

ARS 201- Building Materials and Construction Techniques - III is assigned 1 hour of lecture and 2 hours for drawing and practical sessions in the

construction yard

SEMESTER IV

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
A	ART 202	Climate and Built Form - II	BS	2-0-0-2	4	4
B	ART 204	History of Architecture and Culture-III	AT	3-0-0-0	3	3
C	AET 202	Theory of Structures - IV	AE	2-1-0-0	3	3
D	AET 204	Building Services - II	BS	2-0-0-1	3	3
S	ARD 202	Architectural Design - III	AD	0-0-8-2	10	10
T	ARS 202	Building Materials and Construction Techniques- IV	BC	1-0-0-2	3	3
U	ARS 204	Site Planning	AS	1-0-1-0	2	2
		TOTAL			**28**	**28**

NOTE:

ART 202- Climate and Built Form – II is assigned 2 hours of lecture and 2 hour of practical which is earmarked for conducting experiments in building science laboratory.

AET 204 - Building Services – II, deals with Electrical, Lighting and Illumination. This course is assigned 2 hours of lecture and 1 hour of practical which is earmarked for conducting experiments in building science laboratory.

ARD 202 - Architectural Design - III course is assigned 8 hours of studio and 2 hours of practical which is earmarked for training of advanced application of computer in design and drafting.

ARS 202- Building Materials and Construction Techniques - IV is assigned 1 hour of lecture and 2 hours for drawing and practical sessions in the construction yard

ARS 204 – Site Planning is assigned 1 hour of lecture and 1 hour of studio so that contents learnt can be applied to a design problem.

SEMESTER V

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
A	ART 301	Landscape Design	AT	2-0-1-0	3	3
B	ART 303	History of Architecture and Culture-IV	AT	3-0-0-0	3	3
C	AET 301	Theory of Structures - V	AE	2-1-0-0	3	3
D	AET 303	Building Services - III	BS	2-0-1-0	3	3
E	ECT 301	Elective I	EC	3-0-0-0	3	3
S	ARD 301	Architectural Design - IV	AD	0-0-10-0	10	10
T	ARS 301	Building Materials and Construction Techniques- V	BC	1-0-0-2	3	3
		TOTAL			28	28

NOTE:

ART 301- Landscape Design is assigned 2 hours of lecture and 1 hour of studio so that contents learnt can be applied to a design problem.

AET 303 - Building Services – III, deals with HVAC, Fire Fighting and Safety. This course is assigned 2 hours of lecture and 1 hour of studio so that contents learnt can be applied to a design problem.

ARS 301- Building Materials and Construction Techniques - V is assigned 1 hour of lecture and 2 hours for drawing and practical sessions in the construction yard

SEMESTER VI

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
A	ART 302	Specifications, Cost Estimation and Budgeting	AT	2-1-0-0	3	3
B	ART 304	History of Architecture and Culture-V	AT	3-0-0-0	3	3
C	AET 302	Theory of Structures - VI	AE	2-1-0-0	3	3
D	ART 306	Building Services - IV	BS	2-0-0-1	3	3
E	ECT 302	Elective II	EC	2-0-0-0	2	2
S	ARD 302	Architectural Design - V	AD	0-0-10-0	10	10
T	ARS 302	Building Materials, Construction Techniques and Working Drawing	BC	1-0-0-3	4	4
		TOTAL			28	28

NOTE:

ART 306 - Building Services – IV, deals with Architectural Acoustics. This course is assigned 2 hours of lecture and 1 hour of practical which is earmarked for conducting experiments in building science laboratory.

ARS 302- Building Materials, Construction Techniques and Working Drawing is assigned 1 hour of lecture and 3 hours of practical sessions in the construction yard and learning to prepare working drawings.

SEMESTER VII

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
S	ARD 401	Internship or Practical Training	PE	NA	NA	12
T	ARD 403	Critical Analysis, Material Study/ Market Survey	PE	NA	NA	3
		TOTAL			--	15

NOTE:

ARD 401 - Internship or Practical Training is to be done in a registered architects office for a minimum of 100 working days

ARD 403 - Critical Analysis and any one of Material Study, Market Survey is to be carried out during the same period as Internship

SEMESTER VIII

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
A	ART 402	Human Settlements Planning	AT	3-0-0-0	3	3
B	ART 404	Research Methodology	PE	2-1-0-0	3	3
C	ART 406	Building Economics and Sociology	AT	3-0-0-0	3	3
D	AET 402	Environmental Science for Architecture	BS	3-0-0-0	3	3
E	ECT 402	Elective III	EC	3-0-0-0	3	3
S	ARD 402	Architectural Design - VI	AD	0-0-10-0	10	10
T	ARS 402	Interior Design	AS	1-0-2-0	3	3
		TOTAL			28	28

NOTE:

ART 404 - Research Methodology is assigned 2 hour of lecture and 1 hours of tutorial in order to enable students to learn designing of research.

ARS – Interior Design is assigned 1 hour of lecture and 2 hours of studio so that contents learnt can be applied to a design problem.

SEMESTER IX

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
A	ART 501	Urban Design	AT	2-0-1-0	3	3
B	ART 503	Housing	AT	3-0-0-0	3	3
C	ART 505	Professional Practice	PE	2-1-0-0	3	3
D	ART 507	Project Management	PE	2-0-0-1	3	3
E	ECT 501	Elective IV	EC	2-0-0-0	2	2
S	ARD 501	Architectural Design - VII	AD	0-0-12-0	12	12

T	ARQ 501	Dissertation	PE	0-0-2-0	2	2
		TOTAL			**28**	**28**

NOTE:

ART 501 - Urban Design is assigned 2 hours of lecture and 1 hour of studio so that contents learnt can be applied to the design problem.

ART 505 - Professional Practice is assigned 2 hours of lecture and 1 hour of tutorial so that contents learnt can be applied

ART 507 - Project Management is assigned 2 hours of lecture and 1 hour of practical so that computer applications can be introduced.

SEMESTER X

Slot	Course Code	Course Name	Category	L-T-S-P/D	Hours	Credit
S	ARD 502	Architectural Design Thesis	AD	NA	NA	18
E	ECM 502	Elective V - MOOC	EC	NA	NA	3
		TOTAL			**--**	**21**

NOTE:

ECM 502 – Elective V has to be a MOOC course approved by the university.

Passing grade in an approved course done during the semesters S8 to S10, is to be accepted and no further assessment done.