

MUJ/REGR/11th ACM/2015-05

July 25, 2015

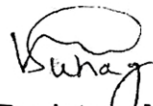
Scheme & Syllabus of B Arch Programme

The Academic Council of the University in its 11th Meeting held on July 15 & 20, 2015 approved the Scheme & Syllabus of B Arch Programme

The approved Scheme & Syllabus are enclosed.

This will be implemented from Academic year 2015-16.




Registrar, MUJ

To:

1. Dean FoD
2. Professor In Charge Academics
3. I/c CoE
4. Dy. Registrar

} Without enclosures

Copy to:

PS to President- for information of President

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11AC (D-3-5) Revised Scheme & Syllabi BHM Batch 2014-18 and BHM Batch 2013-17

The proposal were not considered by the Council in view of the decisions on agenda items 11AC (D-3-3) and 11AC (D-3-4).

11AC (D-3-6) Revised Scheme and Syllabi of BHM Batch 2014-18 to be Offered to BHM Batch 2015-19

The revised scheme and syllabi of BHM batch 2014-18 to be offered to BHM batch 2015-19 were approved by the Council

11AC (D-3-7) Revision of Scheme and Syllabi of BBA Programme

The revised scheme and syllabi of BBA Programme were approved by the Council.

11AC (D-3-8) Revision of Syllabi of B.Com Programme:

The revised syllabi of B Com Programme were approved by the Council.

11AC (D-3-9) Introduction of New Programmes:

In principle approval for introduction of two new programmers, namely B Com (Hons.) and MFC (Master of Finance & Control) was accorded by the Council. The programmes will commence from academic session 2016-17.

The Council further suggested the matter be placed before the Board of Management, in its next meeting.

11AC (D-4) FACULTY OF DESIGN

11AC (D-4-1) Revised Structure and Syllabi of B. Arch:

Revised structure and syllabi of B Arch programme were approved by the Council. It will be implemented from 2015-16. The Council suggested that a course on GIS and Remote Sensing be included.

11AC (D-5) FACULTY OF ARTS & LAW





MANIPAL UNIVERSITY JAIPUR



MINUTES OF THE MEETING

Subject: Board of studies - B. Arch.

Venue: Board Room, FoD

Date: 1 July 2015

Agenda: Revision of syllabus

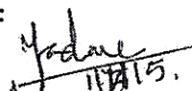
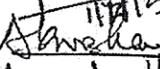
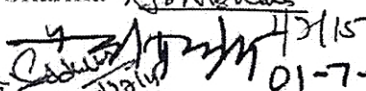

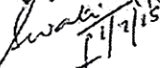
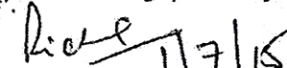
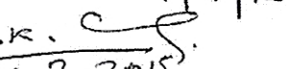
The following members were present in the meeting:

1. Prof. (Dr) Madhura Yadav - Chairperson - Board of Studies, Head, SA&D, MUJ
2. Dr. Anjali Krishna Sharma - Expert - Board of Studies (Director, School of Architecture and Planning, Amity University, Noida)
3. Prof. Pradeep Kumar Pandey -Member, HoD, School of Planning & Design, MUJ
4. Ar. Siddhartha K., Associate Prof.- Member - Board of Studies, MUJ
5. Ar. Swati Dutta, Associate Prof.- Member - Board of studies, MUJ
6. Registrar, MUJ.- Ex-officio Member
7. Prof. (Dr.) N.K. Garg - Special Invitee, Dean, FOD

The Board of Studies approved the present syllabus with the following modifications:

- Integration of Climatology (AR 1303) with Environmental Studies (AR 1208).
- Credits of Environmental Studies (AR 1208) to be reviewed.
- Research Methodology (AR 1804) and Seminar (AR 1706) to be run concurrently in the 7th Semester.
- Integration of vernacular architecture in 4th Semester Architectural Design (AR 1401).
- New environment friendly construction materials, techniques and services to be made part of the subjects of building construction, materials and building services across all the years.

Signature of the Participants:

1. Prof. (Dr.) Madhura Yadav 
2. Dr. Anjali Krishna Sharma 
3. Prof. P. K. Pandey 
4. Ar. Siddhartha K. 
5. Ar. Swati Dutta 
6. Registrar, MUJ 
7. Prof. (Dr.) N.K. Garg 



MANIPAL UNIVERSITY JAIPUR



Date-01.07.2015

BOARD OF STUDIES (B. Arch.) MEETING ATTENDANCE SHEET

Sr. No.	NAME	SIGNATURE
1.	Prof.(Dr.) Madhura Yadav Head, SA&D, MUJ Chairperson	<i>Yadav</i> 11/7/15.
2.	Dr. Anjali Krishna Sharma EXPERT MEMBER - Board of Studies (Director, School of Architecture and Planning, Amity University, Noida)	<i>Anishan</i> 1/7/2015
3.	Prof. Pradeep Kumar Pandey Head, School of Planning & Design MEMBER- Board of Studies, MUJ	<i>Pradeep</i> 01-7-15
4.	Ar. Siddhartha Koduru Associate Professor, MEMBER- Board of Studies, MUJ.	<i>Siddhartha</i> 01/7/15
5.	Ar. Swati Dutta Associate Professor MEMBER- Board of Studies, MUJ	<i>Swati</i> 1/7/15.
6.	Registrar, MUJ MEMBER- Board of Studies, MUJ.	<i>Registrar</i> 1/7
7.	Prof. (Dr.) N.K. Garg Dean, FOD, MUJ Special Invitee	<i>N.K. Garg</i> 1.7.15.

CURRICULUM & SCHEME OF EXAMINATION

B. Arch.: Five Years Program

Proposed as per the Council of Architecture Minimum Standards for Architectural Education 2008 and incorporated from Academic Session 2015-2016

Year	Subject Code	Subject Name	L/S	T	P	C	Evaluation			Contact Hours
	FIRST SEMESTER						In Sem.	End Sem. Theory	End Sem. July/ Practical	
FIRST	AR 1101	Architectural Design I	6	0	0	6	100	-	50	6
	AR 1102	Building Const. & Mat. I	2	0	2	3	50	50	-	4
	AR 1103	Architectural Graphics I	2	0	2	3	100	-	-	4
	AR 1104	History of Architecture I	1	0	2	2	50	50	-	3
	AR 1105	Structures I	2	1	0	3	50	50	-	3
	AR 1106	Visual Arts I	4	0	0	4	100	-	-	4
	AR 1107	Communication Skills	1	0	2	2	50	50	-	3
	AR 1108	Creative Workshop	1	0	2	2	50	-	-	3
	TOTAL			19	1	10	25	550	250	30
THIRD SEMESTER										
SECOND	AR 1301	Architectural Design III	6	0	0	6	100	-	50	6
	AR 1302	Building Const. & Mat. III	2	0	2	3	50	50	-	4
	AR 1303	Climate Responsive Arch.	2	1	0	3	50	50	-	3
	AR 1304	History of Architecture III	1	0	2	2	50	50	-	3
	AR 1305	Structures III	2	1	0	3	50	50	-	3
	AR 1306	Building Services I	2	0	2	3	50	50	-	4
	AR 1307	Computer App. in Arch. II	1	0	2	2	50	-	-	3
	AR 1308	Surveying and Levelling	2	0	2	3	50	-	-	4
	TOTAL			18	2	10	25	450	300	30
FOURTH SEMESTER										
AR 1401	Architectural Design IV	8	0	0	8	100	-	50	8	
AR 1402	Building Const. & Mat. IV	2	0	2	3	50	50	-	4	
AR 1403	Building Codes & Byelaws	1	0	2	2	50	50	-	3	
AR 1404	History of Architecture IV	1	0	2	2	50	50	-	3	
AR 1405	Structures IV	2	1	0	3	50	50	-	3	
AR 1406	Building Services II	2	0	2	3	50	50	-	4	
AR 1407	Computer App. in Arch. III	1	0	2	2	50	-	-	3	
AR 1408	Landscape Architecture	2	0	0	2	50	50	-	2	
TOTAL			19	1	10	25	450	350	30	

L/S – Lecture / Studio, T – Tutorial, P – Practical, C – Credits

Year	Subject Code	Subject Name	L/S	T	P	C	Evaluation			Contact Hours
	FIFTH SEMESTER						In Sem.	End Sem. Theory	End Sem. Jury/Practical	
THIRD	AR 1501	Architectural Design V	10	0	0	10	100	-	50	10
	AR 1502	Building Const. & Mat. V	2	0	2	3	50	50	-	4
	AR 1503	Specification Estimation & Costing	1	0	2	2	50	50	-	3
	AR 1504	History of Architecture V	1	0	2	2	50	50	-	3
	AR 1505	Structures V	2	1	0	3	50	50	-	3
	AR 1506	Building Services III	2	0	2	3	50	50	-	4
	AR 1507	Human Settlement Plng. I	1	0	2	2	50	50	-	3
	TOTAL			19	1	10	25	400	350	30
SEVENTH SEMESTER										
FOURTH	AR 1701	Architectural Design VII	12	0	0	12	100	-	50	12
	AR 1702	Building Const. & Mat. VII	2	0	2	3	50	50	-	4
	AR 1703	Interior Design II	3	0	2	4	100	-	-	5
	AR 1704	Principles of Urban Design	1	0	2	2	50	50	-	3
	AR 1705	Research Methodology	1	0	2	2	50	50	-	3
	AR 1706	Seminar	1	0	2	2	50	-	-	3
	TOTAL			20	0	10	25	400	200	30
Subject Code	Subject Name	L/S	T	P	C	Evaluation			Contact Hours	
						In Sem.	End Sem. Theory	End Sem. Jury/Practical		
SIXTH SEMESTER										
AR 1601	Architectural Design VI	10	0	0	10	100	-	50	10	
AR 1602	Building Const. & Mat. VI	2	0	2	3	50	50	-	4	
AR 1603	Working Drawing I	3	0	2	4	100	-	-	5	
AR 1604	Interior Design I	2	0	2	3	50	50	-	4	
AR 1605	Building Services IV	2	0	2	3	50	50	-	4	
AR 1606	Human Settlement Plng. II	1	0	2	2	50	50	-	3	
TOTAL			20	0	10	25	400	250	30	
EIGHTH SEMESTER										
AR 1801	Design Dissertation I	14	0	0	14	100	-	100	14	
AR 1802	Working Drawing II	3	0	4	5	100	-	-	7	
AR 1803	Housing	1	0	2	2	50	50	-	3	
AR 1804	Construction & Project Management	1	0	2	2	50	50	-	3	
AR 1805	Elective I	1	0	2	2	100	-	-	3	
TOTAL			20	0	10	25	400	200	30	

L/S – Lecture / Studio, T – Tutorial, P – Practical, C - Credits

Year	Subject Code	Subject Name	L/S	T	P	C	Evaluation				Contact Hours	Subject Code	Subject Name	L/S	T	P	C	Evaluation			Contact Hours
	NINTH SEMESTER						In Sem.	End Sem. Theory	End Sem. Jury/ Practical	TENTH SEMESTER								In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
FIFTH	AR 1901	Design Dissertation II	20	0	0	20	100	-	300	20	AR 11001	Professional Training	16 Weeks	25	-	-	400	-			
	AR 1902	Professional Practice	2	0	2	3	50	50	-	4											
	AR 1903	Elective II	1	0	2	2	100	-	-	3											
	AR 1904	Foreign Language (Audit Course)	2	1	0	0	50	50	-	3											
	TOTAL			25	1	4	25	300	400	30	TOTAL			16 Weeks	25	-	400	-			

L/S – Lecture / Studio, T – Tutorial, P – Practical, C - Credits

Electives offered as part of Eighth (AR 1805) and Ninth (AR 1903) Semester B. Arch.

Elective – I (AR 1805)		Elective – II (AR 1903)	
AR 1805-1	Tall Buildings	AR 1903-1	Advanced Urban Design
AR 1805-2	Disaster Management	AR 1903-2	Advanced Landscape Design
AR 1805-3	Energy Conscious Design	AR 1903-3	Architectural Heritage Conservation
AR 1805-4	Urban and Regional Planning	AR 1903-4	Digital Architecture

Note: Students will be able to select the electives as offered by the school. Min. of 10 students are required to run any elective.

CURRICULUM & SCHEME OF EXAMINATION

B. Arch.: Five Years Program

Proposed as per the Council of Architecture Minimum Standards for Architectural Education 2008 and incorporated from Academic Session 2012 -2013.

Y R	SUBJECT CODE	SUBJECT NAME	L/S	T	P	C	Evaluation			Contact Hours
	FIRST SEMESTER						In Sem.	End Sem Theory	End Sem Jury /Practical	
FIRST	AR 1101	Architectural Design I	6	0	0	6	100	-	50	6
	AR 1102	Building Construction & Materials I	2	0	2	3	50	50	-	4
	AR 1103	Architectural Graphics I	2	0	2	3	50	50	-	4
	AR 1104	History of Architecture I	1	0	2	2	50	50	-	3
	AR 1105	Structures I	2	1	0	3	50	50	-	3
	AR 1106	Visual Arts & Basic Design I	4	0	0	4	100	-	-	4
	AR 1107	Communication Skills	1	0	2	2	50	50	-	3
	AR 1108	Creative Workshop	1	0	2	2	50	-	-	3
	TOTAL			19	1	10	25	500	300	
THIRD SEMESTER										
SECOND	AR 1301	Architectural Design III	6	0	0	6	100	-	50	6
	AR 1302	Building Construction & Materials III	2	0	2	3	50	50	-	4
	AR 1303	Architectural Graphics III	2	0	2	3	100	-	-	4
	AR 1304	History of Architecture III	1	0	2	2	50	50	-	3
	AR 1305	Structures III	2	1	0	3	50	50	-	3
	AR 1306	Building Services I	2	1	0	3	50	50	-	3
	AR 1307	Principles of Architecture	1	0	2	2	50	50	-	3
	AR 1308	Computer Aided Design	2	0	2	3	50	-	-	4
	TOTAL			18	2	10	25	500	300	
FOURTH SEMESTER										
	AR 1201	Architectural Design II	6	0	0	6	100	-	50	6
	AR 1202	Building Construction & Materials II	2	0	2	3	50	50	-	4
	AR 1203	Architectural Graphics II	2	0	2	3	100	-	-	4
	AR 1204	History of Architecture II	1	0	2	2	50	50	-	3
	AR 1205	Structures II	2	1	0	3	50	50	-	3
	AR 1206	Visual Arts & Basic Design II	4	0	0	4	100	-	-	4
	AR 1207	Art & Architecture Appreciation	1	0	2	2	50	-	-	3
	AR 1208	Environmental Studies	1	0	2	2	50	50	-	3
TOTAL			19	1	10	25	550	250		30
	AR 1401	Architectural Design IV	8	0	0	8	100	-	50	8
	AR 1402	Building Construction & Materials IV	2	0	2	3	50	50	-	4
	AR 1403	Surveying & Leveling	1	0	3	2	50	-	-	4
	AR 1404	History of Architecture IV	1	0	2	2	50	50	-	3
	AR 1405	Structures IV	2	1	0	3	50	50	-	3
	AR 1406	Building Services II	1	0	2	2	50	50	-	3
	AR 1407	Climatology	2	1	0	3	50	50	-	3
	AR 1408	Landscape Architecture	2	0	0	2	100	-	-	2
TOTAL			19	2	9	25	500	300		30

Y R	SUBJECT T CODE	SUBJECT NAME	L/ S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem Theory	End Sem Jury /Practical	
THIRD	FIFTH SEMESTER									
	AR 1501	Architectural Design V	10	0	0	10	100	-	50	10
	AR 1502	Building Construction & Materials V	2	0	2	3	50	50	-	4
	AR 1503	Building Codes & Byelaws	1	0	2	2	50	50	-	3
	AR 1504	History of Architecture V	1	0	2	2	50	50	-	3
	AR 1505	Structures V	2	1	0	3	50	50	-	3
	AR 1506	Building Services III	2	0	2	3	50	50	-	4
	AR 1507	Climate Responsive Architecture	1	0	2	2	50	50	-	3
TOTAL			19	1	10	25	400	350	30	
SEVEN SEMESTER										
FORTH	AR 1701	Architectural Design VII	10	0	0	10	100	-	50	10
	AR 1702	Interior Design & Detailing	1	0	4	3	100	-	-	5
	AR 1703	Working Drawing II	1	0	4	3	100	-	-	5
	AR 1704	Principles of Urban Design	2	0	1	3	50	50		3
	AR 1705	Structures VII	2	1	0	3	50	50		3
	AR 1706	Seminar	2	0	2	3	50	-	-	4
	TOTAL			18	1	11	25	450	150	30
SIXTH SEMESTER										
AR 1601	Architectural Design VI	10	0	0	10	100	-	50	10	
AR 1602	Building Construction & Materials VI	2	0	2	3	50	50	-	4	
AR 1603	Working Drawing I	2	0	2	3	100	-	-	4	
AR 1604	History of Architecture VI	1	0	2	2	50	50	-	3	
AR 1605	Structures VI	2	1	0	3	50	50	-	3	
AR 1606	Specification & Estimation	1	0	2	2	50	50	-	3	
AR 1607	Human Settlements & Planning	1	0	2	2	50	50	-	3	
TOTAL			19	1	10	25	450	300	30	
EIGHTH SEMESTER										
AR 1801	Design Dissertation I	18	0	0	18	100	-	100	18	
AR 1802	Professional Practice	2	1	0	3	50	50	-	3	
AR 1803	Housing	1	0	2	2	50	50	-	3	
AR 1804	Research Methodology	1	0	2	2	50	50	-	3	
TOTAL			22	1	4	25	250	250	27	

NINTH SEMESTER											TENTH SEMESTER							
FIFTH	AR 1901	Design Dissertation II	17	0	0	17	100	-	300	17	AR 11001	Professional Training	16 Weeks	25	-	-	400	-
	AR 1902	Elective I	2	0	2	3	100	-	-	4								
	AR 1903	Elective II	2	0	2	3	100	-	-	4								
	AR 1904	Foreign Language	1	1	0	2	50	50	-	2								
TOTAL			22	1	4	25	350	350	27	TOTAL			16 Weeks	25	-	400		

ELECTIVE- I		ELECTIVE – II	
AR 1902-1	Tall Buildings	AR 1903-1	Advanced Urban Design
AR 1902-2	Project Management & Valuation	AR 1903-2	Advanced Landscape Design
AR 1902-3	Energy Conscious Design	AR 1903-3	Architectural Conservation
AR 1902-4	Urban and Regional Planning	AR 1903-4	Digital Architecture

L: Lecture, S: Studio, T: Tutorial, P: Practical

Note: Students will be able to select the electives as offered by the school. Min. of 10 students are required to run any elective.

REGULATIONS SCHEME OF EXAMINATION AND SYLLABUS

(As prescribed by Manipal University Jaipur)

BACHELOR OF ARCHITECTURE (B. Arch.)

Five Year Degree Course

APPLICABLE FROM THE ACADEMIC YEAR
2015 - 2016

School of Architecture & Design

Faculty of Design

Manipal University, Jaipur

(01 July 2015)

Comparison of Old and Revised SCHEME OF EXAMINATION

First Semester (Old)

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
	First Semester						In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
1	AR 1101	Architectural Design I	6	0	0	6	100	-	50	6
	AR 1102	Building Const. & Mat. I	2	0	2	3	50	50	-	4
	AR 1103	Architectural Graphics I	2	0	2	3	50	50	-	4
	AR 1104	History of Architecture I	1	0	2	2	50	50	-	3
	AR 1105	Structures I	2	1	0	3	50	50	-	3
	AR 1106	Visual Arts & Basic Design I	4	0	0	4	100	-	-	4
	AR 1107	Communication Skills	1	0	2	2	50	50	-	3
	AR 1108	Creative Workshop	1	0	2	2	50	-	-	3
	TOTAL			19	1	10	25	500	300	30

- AR 1106**
 Change in nomenclature of course from Visual Arts & Basic Design I to Visual Arts I

First Semester (New)

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
	First Semester						In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
1	AR 1101	Architectural Design I	6	0	0	6	100	-	50	6
	AR 1102	Building Const. & Mat. I	2	0	2	3	50	50	-	4
	AR 1103	Architectural Graphics I	2	0	2	3	100	-	-	4
	AR 1104	History of Architecture I	1	0	2	2	50	50	-	3
	AR 1105	Structures I	2	1	0	3	50	50	-	3
	AR 1106	Visual Arts I	4	0	0	4	100	-	-	4
	AR 1107	Communication Skills	1	0	2	2	50	50	-	3
	AR 1108	Creative Workshop	1	0	2	2	50	-	-	3
	TOTAL			19	1	10	25	550	250	30

L/S – Lecture / Studio

T – Tutorial, P – Practical, C - Credits

Comparison of Old and Revised SCHEME OF EXAMINATION

Second Semester (Old)

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
1	Second Semester									
	AR 1201	Architectural Design II	6	0	0	6	100	-	50	6
	AR 1202	Building Const. & Mat. II	2	0	2	3	50	50	-	4
	AR 1203	Architectural Graphics II	2	0	2	3	100	-	-	4
	AR 1204	History of Architecture II	1	0	2	2	50	50	-	3
	AR 1205	Structures II	2	1	0	3	50	50	-	3
	AR 1206	Visual Arts & Basic Design II	4	0	0	4	100	-	-	4
	AR 1207	Art & Arch. Appreciation	1	0	2	2	50	-	-	3
	AR 1208	Environmental Studies	1	0	2	2	50	50	-	3
TOTAL			19	1	10	25	550	250	30	

- AR 1206**
Change in name of course from Visual Arts & Basic Design II to Visual Arts II

- AR 1207**
Computer Applications in Architecture I replacing Art & Architecture Appreciation

Second Semester (New)

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
1	Second Semester									
	AR 1201	Architectural Design II	6	0	0	6	100	-	50	6
	AR 1202	Building Const. & Mat. II	2	0	2	3	50	50	-	4
	AR 1203	Architectural Graphics II	2	0	2	3	100	-	-	4
	AR 1204	History of Architecture II	1	0	2	2	50	50	-	3
	AR 1205	Structures II	2	1	0	3	50	50	-	3
	AR 1206	Visual Arts II	4	0	0	4	100	-	-	4
	AR 1207	Computer Appl. in Arch I	1	0	2	2	50	-	-	3
	AR 1208	Environmental Studies	1	0	2	2	50	50	-	3
TOTAL			19	1	10	25	550	250	30	

L/S – Lecture / Studio
T – Tutorial, P – Practical, C - Credits

Comparison of Old and Revised SCHEME OF EXAMINATION

Third Semester (Old)

- **AR 1303** – Climate Responsive Architecture (previously dealt in 5th Semester AR 1507) replacing Architectural Graphics III

- **AR 1307** – Computer Applications in Architecture II replacing Principles of Architecture

- **AR 1308** – Surveying and levelling (previously dealt in 4th Semester AR1403) replacing Computer Aided Design

Third Semester (New)

L/S – Lecture / Studio

T – Tutorial, P – Practical, C - Credits

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
2	Third Semester									
	AR 1301	Architectural Design III	6	0	0	6	100	-	50	6
	AR 1302	Building Const. & Mat. III	2	0	2	3	50	50	-	4
	AR 1303	Architectural Graphics III	2	0	2	3	100	-	-	4
	AR 1304	History of Architecture III	1	0	2	2	50	50	-	3
	AR 1305	Structures III	2	1	0	3	50	50	-	3
	AR 1306	Building Services I	2	1	0	3	50	50	-	3
	AR 1307	Principles of Architecture	1	0	2	2	50	50	-	3
	AR 1308	Computer Aided Design	2	0	2	3	50	-	-	4
	TOTAL		18	2	10	25	550	250		30
Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
2	Third Semester									
	AR 1301	Architectural Design III	6	0	0	6	100	-	50	6
	AR 1302	Building Const. & Mat. III	2	0	2	3	50	50	-	4
	AR 1303	Climate Responsive Arch.	2	1	0	3	50	50	-	3
	AR 1304	History of Architecture III	1	0	2	2	50	50	-	3
	AR 1305	Structures III	2	1	0	3	50	50	-	3
	AR 1306	Building Services I	2	0	2	3	50	50	-	4
	AR 1307	Computer Appl. in Arch. II	1	0	2	2	50	-	-	3
	AR 1308	Surveying and Levelling	2	0	2	3	50	-	-	4
	TOTAL		18	2	10	25	450	300		30

Comparison of Old and Revised SCHEME OF EXAMINATION

Fourth Semester (Old)

- **AR 1403** – Building Codes & Byelaws (previously dealt in 5th Semester AR 1503) replacing Surveying and Levelling (shifted to 3rd Semester AR 1308)

- **AR 1407** – Computer Applications in Architecture III replacing Climatology

Fourth Semester (New)

L/S – Lecture / Studio
T – Tutorial, P – Practical, C - Credits

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
2	Fourth Semester									
	AR 1401	Architectural Design IV	8	0	0	8	100	-	50	8
	AR 1402	Building Const. & Mat. IV	2	0	2	3	50	50	-	4
	AR 1403	Surveying and Levelling	1	0	3	2	50	-	-	4
	AR 1404	History of Architecture IV	1	0	2	2	50	50	-	3
	AR 1405	Structures IV	2	1	0	3	50	50	-	3
	AR 1406	Building Services II	1	0	2	2	50	50	-	3
	AR 1407	Climatology	2	1	0	3	50	50	-	3
	AR 1408	Landscape Architecture	2	0	0	2	100	-	-	2
TOTAL			19	2	9	25	500	300	30	
Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
2	Fourth Semester									
	AR 1401	Architectural Design IV	8	0	0	8	100	-	50	8
	AR 1402	Building Const. & Mat. IV	2	0	2	3	50	50	-	4
	AR 1403	Building Codes & Byelaws	1	0	2	2	50	50	-	3
	AR 1404	History of Architecture IV	1	0	2	2	50	50	-	3
	AR 1405	Structures IV	2	1	0	3	50	50	-	3
	AR 1406	Building Services II	2	0	2	3	50	50	-	4
	AR 1407	Computer Appl. in Arch III	1	0	2	2	50	-	-	3
	AR 1408	Landscape Architecture	2	0	0	2	50	50	-	2
TOTAL			19	1	10	25	450	350	30	

Comparison of Old and Revised SCHEME OF EXAMINATION

Fifth Semester (Old)

- **AR 1503** – Specification Estimation & Costing (previously dealt in 6th Semester AR 1606) replacing Building Codes & Byelaws (shifted to 4th Semester AR 1403)

- **AR 1507** – Human Settlement Planning I replacing Climate Responsive Architecture (shifted to 3rd Semester AR 1303)

Fifth Semester (New)

L/S – Lecture / Studio

T – Tutorial, P – Practical, C - Credits

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
	Fifth Semester									
3	AR 1501	Architectural Design V	10	0	0	10	100	-	50	10
	AR 1502	Building Const. & Mat. V	2	0	2	3	50	50	-	4
	AR 1503	Building Codes & Byelaws	1	0	2	2	50	50	-	3
	AR 1504	History of Architecture V	1	0	2	2	50	50	-	3
	AR 1505	Structures V	2	1	0	3	50	50	-	3
	AR 1506	Building Services III	2	0	2	3	50	50	-	4
	AR 1507	Climate Responsive Arch.	1	0	2	2	50	50	-	3
	TOTAL		19	1	10	25	400	350		30

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
	Fifth Semester									
3	AR 1501	Architectural Design V	10	0	0	10	100	-	50	10
	AR 1502	Building Const. & Mat. V	2	0	2	3	50	50	-	4
	AR 1503	Specification Estimation & Costing	1	0	2	2	50	50	-	3
	AR 1504	History of Architecture V	1	0	2	2	50	50	-	3
	AR 1505	Structures V	2	1	0	3	50	50	-	3
	AR 1506	Building Services III	2	0	2	3	50	50	-	4
	AR 1507	Human Settlement Plng. I	1	0	2	2	50	50	-	3
	TOTAL		19	1	10	25	400	350		30

Comparison of Old and Revised SCHEME OF EXAMINATION

Sixth Semester (Old)

- **AR 1604** – Interior Design I (previously dealt as part of 7th Semester AR 1702) replacing History of Architecture VI

- **AR 1605** – Building Services IV replacing Structures VI

- **AR 1606** – Human Settlement & Plng. II replacing Specification & Estimation

Sixth Semester (New)

L/S – Lecture / Studio

T – Tutorial, P – Practical, C - Credits

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
3	Sixth Semester									
	AR 1601	Architectural Design VI	10	0	0	10	100	-	50	10
	AR 1602	Building Const. & Mat. VI	2	0	2	3	50	50	-	4
	AR 1603	Working Drawing I	2	0	2	3	100	-	-	4
	AR 1604	History of Architecture VI	1	0	2	2	50	50	-	3
	AR 1605	Structures VI	2	1	0	3	50	50	-	3
	AR 1606	Specification & Estimation	1	0	2	2	50	50	-	3
	AR 1607	Human Settlement & Plng.	1	0	2	2	50	50	-	3
	TOTAL		19	1	10	25	450	300		30

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
3	Sixth Semester									
	AR 1601	Architectural Design VI	10	0	0	10	100	-	50	10
	AR 1602	Building Const. & Mat. VI	2	0	2	3	50	50	-	4
	AR 1603	Working Drawing I	3	0	2	4	100	-	-	5
	AR 1604	Interior Design I	2	0	2	3	50	50	-	4
	AR 1605	Building Services IV	2	0	2	3	50	50	-	4
	AR 1606	Human Settlement & Plng. II	1	0	2	2	50	50	-	3
	TOTAL		20	0	10	25	400	250		30

Comparison of Old and Revised SCHEME OF EXAMINATION

Seventh Semester (Old)

- **AR 1702** – Building Construction & Materials VII replacing Interior Design & Detailing (course content dealt in 6th Semester AR 1604 & 7th Semester AR 1703)

- **AR 1703** – Interior Design II replacing Working Drawing II (shifted to 8th Semester AR 1802)

- **AR 1705** – Research Methodology replacing Structures VII

Seventh Semester (New)

L/S – Lecture / Studio

T – Tutorial, P – Practical, C - Credits

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
	Seventh Semester									
4	AR 1701	Architectural Design VII	10	0	0	10	100	-	-	10
	AR 1702	Interior Design & Detailing	1	0	4	3	100	-	-	5
	AR 1703	Working Drawing II	1	0	4	3	100	-	-	5
	AR 1704	Principles of Urban Design	2	0	1	3	50	50	50	3
	AR 1705	Structures VII	2	1	0	3	50	50	50	3
	AR 1706	Seminar	2	0	2	3	50	-	-	4
	TOTAL		18	1	11	25	450	200		30

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
	Seventh Semester									
4	AR 1701	Architectural Design VII	12	0	0	12	100	-	50	12
	AR 1702	Building Const. & Mat. VII	2	0	2	3	50	50	-	4
	AR 1703	Interior Design II	3	0	2	4	100	-	-	5
	AR 1704	Principles of Urban Design	1	0	2	2	50	50	-	3
	AR 1705	Research Methodology	1	0	2	2	50	50	-	3
	AR 1706	Seminar	1	0	2	2	50	-	-	3
	TOTAL		20	0	10	25	400	200		30

Comparison of Old and Revised SCHEME OF EXAMINATION

Eighth Semester (Old)

- **AR 1802** – Working Drawing II replacing Professional Practice (shifted to 9th Semester AR 1902)

- **AR 1804** – Construction Project Management replacing Research Methodology (shifted to 7th Semester AR 1705)

- **AR 1805** – Elective I (shifted from 9th Semester AR 1902)

Eighth Semester (New)

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
4	Eighth Semester									
	AR 1801	Design Dissertation I	18	0	0	18	100	-	100	18
	AR 1802	Professional Practice	2	1	0	3	50	50	-	3
	AR 1803	Housing	1	0	2	2	50	50	-	3
	AR 1804	Research Methodology	1	0	2	2	50	50	-	3
TOTAL			18	1	11	25	450	200		30

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
4	Eighth Semester									
	AR 1801	Design Dissertation I	14	0	0	14	100	-	100	14
	AR 1802	Working Drawing II	3	0	4	5	100	-	-	7
	AR 1803	Housing	1	0	2	3	50	50	-	3
	AR 1804	Construction Project Management	1	0	2	2	50	50	-	3
AR 1805	Elective I	1	0	2	2	100	-	-	3	
TOTAL			20	0	10	25	400	200		30

L/S – Lecture / Studio

T – Tutorial, P – Practical, C - Credits

Comparison of Old and Revised SCHEME OF EXAMINATION

Ninth Semester (Old)

- **AR 1902** – Professional Practice replacing Elective I (shifted to 8th Semester AR 1805)

- **AR 1904** – Foreign Language is an Audit Course with Zero Credits

Ninth Semester (New)

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
5	Ninth Semester									
	AR 1901	Design Dissertation II	17	0	0	17	100	-	300	17
	AR 1902	Elective I	2	0	2	3	100	-	-	4
	AR 1903	Elective II	2	0	2	3	100	-	-	4
	AR 1904	Foreign Language	1	1	0	2	50	50	-	2
	TOTAL		22	1	4	25	350	350		27

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical	
5	Ninth Semester									
	AR 1901	Design Dissertation II	20	0	0	20	100	-	300	20
	AR 1902	Professional Practice	2	0	2	3	50	50	-	4
	AR 1903	Elective II	1	0	2	2	100	-	-	3
	AR 1904	Foreign Language (Audit Course)	2	1	0	0	50	50	-	3
	TOTAL		25	1	4	25	300	400		30

L/S – Lecture / Studio

T – Tutorial, P – Practical, C - Credits

Comparison of Old and Revised SCHEME OF EXAMINATION

Tenth Semester (Old & New)

Year	COURSE CODE	COURSE NAME	L/S	T	P	C	Evaluation			Contact Hours		
							In Sem.	End Sem. Theory	End Sem. Jury/ Practical			
	Tenth Semester											
5	AR 11001	Professional Training					16 Weeks	25	-	-	400	-
		TOTAL					16 Weeks	25	-		400	-

L/S – Lecture / Studio

T – Tutorial, P – Practical, C - Credits

Electives offered as part of Eighth (AR 1805) Semester B. Arch.

Elective – I (AR 1902)		Elective – I (AR 1805)	
AR 1902-1	Tall Buildings	AR 1805-1	Tall Buildings
AR 1902-2	Project Management & Valuation	AR 1805-2	Disaster Management
AR 1902-3	Energy Conscious Design	AR 1805-3	Energy Conscious Design
AR 1902-4	Urban and Regional Planning	AR 1805-4	Urban and Regional Planning

Electives offered as part of Ninth (AR 1903) Semester B. Arch.

Elective – II (AR 1903)		Elective – II (AR 1903)	
AR 1903-1	Advanced Urban Design	AR 1903-1	Advanced Urban Design
AR 1903-2	Advanced Landscape Design	AR 1903-2	Advanced Landscape Design
AR 1903-3	Architectural Conservation	AR 1903-3	Architectural Conservation
AR 1903-4	Digital Architecture	AR 1903-4	Digital Architecture

Name of Program with code: Bachelor of Architecture (B Arch), Code: 501	
Name of Course with Code: AR1105 Structures - I	Name of Course with Code: AR1105 Structures - I
Syllabus Prior Revision	Syllabus Post Revision
<p>Introduction to fundamentals of structures for buildings; Classification of structures, overview of different types of structural systems used in architecture; Structural systems in nature; Building loads, effects on buildings, force systems, conditions for equilibrium; Elementary Analysis of structural response of beams; Study of Geometric Properties of Structural Sections- center of gravity and Moment of Inertia of different section.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Prasad I. B., (1974), <i>Text Book of Applied Mechanics</i>, Khanna Publishers, Delhi. 2. Salvadori, Mario and Heller, Robert, (1963), <i>Structure in Architecture — The Building of Building</i>, Prentice-Hall, New Jersey. 3. Bhavikatti S S, Rajashekarappa K G., (2008), <i>Engineering Mechanics</i>, New Age International, Delhi. 4. Popov Egor P, Balan Toader A, (2009), <i>Engineering Mechanics of Solids</i>, Pearson Education, Delhi. 5. Ramamrutham S, Narayanan R., (1997), <i>Engineering Mechanics</i>, Dhanpath Rai, Delhi. 6. Kumar K L, (2003), <i>Engineering Mechanics</i>, Tata McGraw Hill, New Delhi. 7. Shames Irving H, (2007), <i>Engineering Mechanics</i>, Prentice Hall, Delhi. 	<p>Introduction to fundamentals of structures for buildings; Classification of structures, overview of different types of structural systems used in architecture; Structural systems in nature; Building loads, effects on buildings, force systems, conditions for equilibrium; Elementary Analysis of structural response of beams; Study of Geometric Properties of Structural Sections- center of gravity and Moment of Inertia of different section; Concept of flinched beam and analysis of deflections in beam; Analysis of two hinged and three hinged arches and lintels.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Salvadori, M. & Heller, R., 1963. <i>Structure in Architecture — The Building of Building</i>. New Jersey: Prentice Hall. 2. Ramamrutham, S. & Narayana, R., 2003. <i>Strength of Materials</i>. Delhi: Dhanpat Rai and Sons. 3. Popov, E. P. & Balan, T. A., 2009. <i>Engineering Mechanics of Solids</i>. Delhi: Pearson Education. 4. Ramamrutham, S. & Narayanan, R., 1997. <i>Engineering Mechanics</i>. Delhi: Dhanpath Rai. 5. Kumar K. L., 2003. <i>Engineering Mechanics</i>. New Delhi: Tata McGraw Hill. 6. Shames I. H., 2007, <i>Engineering Mechanics</i>, Prentice Hall, Delhi. 7. Basavarajaiah, B. S. & Mahadeveappa, P., 2001. <i>Strength of Materials</i>. New Delhi: CBS Publishers.
Name of Course with Code: AR 1201 Architectural Design - II	Name of Course with Code: AR1201 Architectural Design - II
Syllabus Prior Revision	Syllabus Post Revision
<p>Extension of the compositional principles already taught in the earlier design studio; Ideal design methodology; Understanding user circulation and space requirements; Taking up design of small uncomplicated spaces using the ideal-design methodology; Exploration of various methods of presentation; including the construction of 3-dimensional scaled models; Emphasis on visual design.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Ching Francis. (1979). <i>Architecture Form, Space and Order</i>. Van Nostrand Reinhold Company, New York. 	<p>Extension of the compositional principles already taught in the earlier design studio; Ideal design methodology; Understanding user circulation and space requirements; Taking up design of small uncomplicated spaces using the ideal-design methodology; Exploration of various methods of presentation; including the construction of 3-dimensional scaled models; Emphasis on visual design, Principles of Architecture by Vitruvius & The Seven Lamps of Architecture by John Ruskin; Architectural Design Methodology.</p> <p>References:</p>

<ol style="list-style-type: none"> 2. IS Code Reference Manual for the Building Design for Physically Handicapped. 3. Neufert Ernst. (1970). Architect's Data. Crosby Lockwood and Sons, London. 4. Chiara JD and Calender. (1983). Time Savers Standards for Building Types. McGraw Hill Book Company, New York 	<ol style="list-style-type: none"> 1. Ching, F. D. K., 2014. Architecture Form, Space and Order. New York: Wiley. 2. Neufert, E., 2012. Architect's Data. Wiley. 3. Simon, U., 2014. Analysing Architecture. 3 ed. Routledge. 4. Radford, A. & et al, 2014. The Elements of Modern Architecture: Understanding Contemporary Buildings. London: Thames & Hudson. 5. Boys, J., 2011. Towards Creative Learning Spaces. Taylor and Francis. 6. Allen, E. & Iano, J., 2006. The Architect's Studio Companion: Rules of Thumb for Preliminary Design. New York: Wiley. 7. Fawcett, P., 2003. Architecture: Design Notebook. 2 ed. Architectural Press.
<p>Name of Course with Code: AR 1401 Architectural Design - IV</p>	<p>Name of Course with Code: AR 1401 Architectural Design - IV</p>
<p>Syllabus Prior Revision</p>	<p>Syllabus Post Revision</p>
<p>Volumetric study of built forms; Various building materials & their application in architectural design; Critical appraisal of both internal and external spaces, evaluation of contemporary architectural works as warm up exercises; Design problems of relatively complex nature to be worked out with exposure to case study and literature study; Design exercises for various climatic zones; A short study tour of two to four days to study the built forms in various regions; The design exercise is to address undulating nature of site (urban/rural); study of contours and related challenges; Three dimensional presentation (in perspective model on computer graphics).</p> <p>References:</p> <ol style="list-style-type: none"> 1. Calender & Chiara, J., 1983. Time Savers Standards for Building types. New York: McGraw Hill Book Company. 2. Ching, F. D. K., 1979. Architecture: Form, Space and Order. New York: Van Nostrand Reinhold Company. 3. Neufert, E., 1970. Architect's Data. London: Crosby Lockwood and sons. 4. Reid, W. G., 2002. Landscape Graphics. s.l.:Waston Guptill. 5. Rubenstein, H. M., 1996. A Guide to Site Planning and Landscape <i>Construction</i>. Wiley. 	<p>Volumetric study of built forms; Various building materials & their application in architectural design; Critical appraisal of both internal and external spaces, evaluation of contemporary architectural works as warm up exercises; Design problems of relatively complex nature to be worked out with exposure to case study and literature study; Design exercises for various climatic zones; A short study tour of two to four days to study the built forms in various regions; The design exercise is to address undulating nature of site (urban/rural); study of contours and related challenges; Three dimensional presentation (in perspective model on computer graphics). Integration of vernacular architecture and study of its elements.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Calender & Chiara, J., 1983. Time Savers Standards for Building types. New York: McGraw Hill Book Company. 2. Ching, F. D. K., 1979. Architecture: Form, Space and Order. New York: Van Nostrand Reinhold Company. 3. Neufert, E., 1970. Architect's Data. London: Crosby Lockwood and sons. 4. Reid, W. G., 2002. Landscape Graphics. s.l.:Waston Guptill. 5. Rubenstein, H. M., 1996. A Guide to Site Planning and Landscape <i>Construction</i>. Wiley.

Name of Course with Code: AR 1203 Architectural Graphics - II	Name of Course with Code: AR 1203 Architectural Graphics - II
Syllabus Prior Revision	Syllabus Post Revision
<p>Sections of solids; Auxiliary views; True shapes of sections; Development of surfaces; Interpenetration of solids; Perspective projection of simple geometrical objects.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Yee, Rendow. (2007). Architectural Drawing: A Visual Compendium of Types and Methods. Wiley; 3rd edition. 2. Ching, Francis D. K. (2009). Architectural Graphics, John Wiley & Sons. 3. Bhatt, N D. (2006). Engineering Drawing. Charotar Publishing House, Bangalore, India. 4. Montague, Joh. (2010). Basic Perspective Drawing: A Visual Approach, John Wiley & Sons 5. Andrews, Jonathan. (2010). Architectural Visions: Contemporary Sketches, Perspectives, Drawings, Braun Publishing Ag. 	<p>Sections of solids; Auxiliary views; True shapes of sections; Development of surfaces; Interpenetration of solids; Perspective projection of simple geometrical objects; Interior and Exterior Perspectives using Grid and Measuring Line Method; Shadows cast by simple forms on plain surfaces e.g. points, lines, planes and simple solids; Sciography in Plan, Elevation and Perspectives.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Andrews, J., 2010. Architectural Visions: Contemporary Sketches, Perspectives, Drawings. Braun Publishing AG. 2. Ching, F. D. K., 2009. Architectural Graphics. New York: John Wiley & Sons. 3. Gill, R. W., 1991. Manual of Rendering with Pen and Ink. London: Thames and Hudson. 4. Helms, M. E., 1990. Perspective Drawing - A Step-by-Step Handbook. New Jersey: Prentice Hall, Eagle Wood Cliff. 5. Shankar, M., 1994. Perspective and Sciography. Bombay: Allied Publishers Limited.
Name of Course with Code: AR 1208 Environmental Studies	Name of Course with Code: AR 1208 Environmental Studies
Syllabus Prior Revision	Syllabus Prior Revision
<p>Basic components of the environment: Various spheres of the earth, internal structure of the earth; Ecosystem: Structure and functions of the ecosystem, Ecological succession, Threats to major ecosystems; Biodiversity and its conservation: Importance of biodiversity to mankind, Factors affecting Biodiversity, Threats to biodiversity, Conservation of biodiversity; Natural resources: Forest, water, mineral, land and food resources of India, conservation and management; Environmental pollution and control: Air pollution, Water pollution, Soil pollution, Noise pollution – sources, characteristics, sampling, analysis and measurement, various pollution control measures; Solid waste and hazardous waste management-sources, characteristics and control measures of urban and industrial wastes, environmental problems and health risks caused by hazardous waste; Environmental concerns: Urbanization, Industrialization, Agricultural revolution – their impact on the environment, consequences like global warming, ozone layer depletion and acid rain; Brief introduction to Environment Impact Assessment.</p>	<p>Basic components of the environment: Various spheres of the earth, internal structure of the earth; Ecosystem: Structure and functions of the ecosystem, Ecological succession, Threats to major ecosystems; Biodiversity and its conservation: Importance of biodiversity to mankind, Factors affecting Biodiversity, Threats to biodiversity, Conservation of biodiversity; Natural resources: Forest, water, mineral, land and food resources of India, conservation and management; Environmental pollution and control: Air pollution, Water pollution, Soil pollution, Noise pollution – sources, characteristics, sampling, analysis and measurement, various pollution control measures; Solid waste and hazardous waste management-sources, characteristics and control measures of urban and industrial wastes, environmental problems and health risks caused by hazardous waste; Environmental concerns: Urbanization, Industrialization, Agricultural revolution – their impact on the environment, consequences like global warming, ozone layer depletion and acid rain; Brief introduction to Environment Impact Assessment; Elements of climate;</p>

<p>References:</p> <ol style="list-style-type: none"> 1. P Venugopal Rao. (2008). Principles of Environmental Science and Engineering. Prentice Hall of India Private Limited, New Delhi 2. Anil Kumar De and Arnab Kumar De. (2007). Environmental Studies. New Age International Publishers, New Delhi. 3. Erach Bharucha. (2005). Text book of Environmental Studies for Undergraduate Courses. Universities Press, Hyderabad 4. Simonds, John Ormsbee, (1978), Earthscapes, Mc Graw Hill. 	<p>climatic zones; Study of thermal & ventilation parameters based on human comfort; Climatic charts and their uses; Understanding the thermal environment and design as a means of furthering thermal comfort; Passive and low energy approaches to the achievement of thermal comfort. Method of recording the position of sun in relation to earth, solar chart, shadow angle protractor and its application; The visual environment – study of day lighting as a means of providing light within built spaces. Day light prediction tools and design of shading devices; Design considerations for various climatic zones.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Rao, P. V., 2008. Principles of Environmental Science and Engineering. New Delhi: Prentice Hall of India Private Limited. 2. Dey, A. K. & Dey, A. K., 2007. Environmental Studies. New Delhi: New Age International Pub. 3. Brown, G. Z., 1985. Sun, Wind and Light: Architectural Design Strategies. New York: John Wiley & Sons. 4. Evans, M., 1980. Housing, Climate and Comfort. London: Architectural Press. 5. Koeningsberger & et al, 1975. Manual of Tropical Housing and Building (Part-II). Hyderabad: Climate Design, Orient Longman Ltd
<p>Name of Course with Code: AR 1306 Building Services - I</p>	<p>Name of Course with Code: AR 1306 Building Services - I</p>
<p>Syllabus Prior Revision</p> <p>Water Supply: General ideas of sources of water supply, qualitative and quantitative aspects, impurities, hard and soft water treatment and distribution systems; Domestic water supply systems, sump, overhead tank; Pipe sizes, pipe fittings — their technical names, viz, coupling, tee, elbow, bend, gate valve, non-return valve and latest fittings in the market; Cold water and hot water supply for multistoried buildings; Types of taps, types of valves, etc.; Solar Water Heating System. Sanitation: Refuse, types, collection and disposal; Basic principles of sanitation and disposal of waste water from buildings; Urban and rural drainage and sanitation; Different collection and disposal fittings; A brief on sewage treatment, septic tanks, oxidation ponds, soak pits, aqua privy, manholes, inspection chambers, intercepting chambers, cast iron manholes; Self-cleaning velocity, drains on sloping sites, sub-soil drainage, garage drainage and lay-out of simple drainage systems and testing of drains; Sewers, materials, workmanship, laying and testing of sewers, clearing of sewers, surface drains, ventilation of sewers, storm water drainage system; Recycling of</p>	<p>Syllabus Post Revision</p> <p>Water Supply: General ideas of sources of water supply, qualitative and quantitative aspects, impurities, hard and soft water treatment and distribution systems; Domestic water supply systems, sump, overhead tank; Pipe sizes, pipe fittings — their technical names, viz, coupling, tee, elbow, bend, gate valve, non-return valve and latest fittings in the market; Cold water and hot water supply for multistoried buildings; Types of taps, types of valves, etc.; Solar Water Heating System. Sanitation: Refuse, types, collection and disposal; Basic principles of sanitation and disposal of waste water from buildings; Urban and rural drainage and sanitation; Different collection and disposal fittings; A brief on sewage treatment, septic tanks, oxidation ponds, soak pits, aqua privy, manholes, inspection chambers, intercepting chambers, cast iron manholes; Self-cleaning velocity, drains on sloping sites, sub-soil drainage, garage drainage and lay-out of simple drainage systems and testing of drains; Sewers, materials, workmanship, laying and testing of sewers, clearing of sewers, surface drains, ventilation of sewers, storm water drainage system; Recycling of</p>

<p>black water. Rain Water Disposal: Storm water drainage systems for buildings; Rain Water Harvesting. Fire Suppression Systems: Suppression agents—Types of fire; Suppression systems—water supplies, fire fighting tanks—Wet Riser, Dry Riser; Hydrant systems—Automatic sprinkler systems; Fire doors; Fire resistant materials; Emergency evacuation method and fire exit plan for multistoried building.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Birdie J.S. and Birdie G.S. (1998), Water Supply and Sanitary Engineering, Dhanpathray Publishing Company, New Delhi. 2. Burke, Ken, (1982), Basic Plumbing Techniques, Ortho Books, Chevron Chemical Company, San Ramon, Canada. 3. Hussain, S.K, (1982), Water Supply and Sanitary Engineering, Dhanpatray and Sons, New Delhi. 4. Rangwala, S.C, (1969), Fundamentals of Water Supply and Sanitary Engineering, Charotar Publishing Company, Anand. 5. Wise, Alan Frederick Edward & Swaffield, J.A, (2002), Water, Sanitary & Waste Services for Building, Butterworth-Heinemann, Oxford. 	<p>black water. Rain Water Disposal: Storm water drainage systems for buildings; Rain Water Harvesting. References:</p> <ol style="list-style-type: none"> 1. Birdie J.S. and Birdie G.S. (1998), Water Supply and Sanitary Engineering, Dhanpathray Publishing Company, New Delhi. 2. Burke, Ken, (1982), Basic Plumbing Techniques, Ortho Books, Chevron Chemical Company, San Ramon, Canada. 3. Hussain, S.K, (1982), Water Supply and Sanitary Engineering, Dhanpatray and Sons, New Delhi. 4. Rangwala, S.C, (1969), Fundamentals of Water Supply and Sanitary Engineering, Charotar Publishing Company, Anand. 5. Wise, Alan Frederick Edward & Swaffield, J.A, (2002), Water, Sanitary & Waste Services for Building, Butterworth-Heinemann, Oxford.
<p>Name of Course with Code: AR 1406 Building Services - II</p>	<p>Name of Course with Code: AR 1406 Building Services - II</p>
<p>Syllabus Prior Revision</p>	<p>Syllabus Post Revision</p>
<p>Electrical Services: Sources of electrical energy supplied to buildings, 2/3 phase supply, electricity supply layout at city and building level, scope and requirements; Requirements of electrical materials such as distribution board, MCB, conductors, insulators, types and requirements of electrical cables, control equipment such - switch gear, safety devices; Rules and regulations for electrification of buildings with relevant standards; Types of electrical wiring system for normal and heavy loads, electrical appliances and their consumption values, earthing; Communication and IT services, installations and cabling. Electronic surveillance and security systems. Energy efficient systems and equipment's. Case studies of energy consumption and conservation in different building types. Illumination: Illumination calculation and required standards of lighting. Day lighting – its calculation; glare control; concepts and considerations for artificial lighting; different types of indoor and outdoor lighting. Mechanical Transportation Systems: Calculations for design and installation of mechanical transportation systems;</p>	<p>Electrical Services: Sources of electrical energy supplied to buildings, 2/3 phase supply, electricity supply layout at city and building level, scope and requirements; Requirements of electrical materials such as distribution board, MCB, conductors, insulators, types and requirements of electrical cables, control equipment such - switch gear, safety devices; Rules and regulations for electrification of buildings with relevant standards; Types of electrical wiring system for normal and heavy loads, electrical appliances and their consumption values, earthing; Communication and IT services, installations and cabling. Electronic surveillance and security systems. Energy efficient systems and equipment's. Case studies of energy consumption and conservation in different building types. Illumination: Illumination calculation and required standards of lighting. Day lighting – its calculation; glare control; concepts and considerations for artificial lighting; different types of indoor and outdoor lighting.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Stein/Raynolds and Mc Guinness. (1966). Mechanical and Electrical Equipment for Buildings, Vol.1. John Wiley and Sons, NY.

<p>concept of mechanized transportation systems; Types of lifts, escalators and travelators.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Stein/Raynolds and Mc Guinness. (1966). Mechanical and Electrical Equipment for Buildings, Vol.1. John Wiley and Sons, NY. 2. Egan, David M. (1983). Concepts in Architectural Lighting. McGraw Hill Book Company. 3. Dagostino, F. R. (1978). Mechanical and Electrical Systems in Construction in Architecture. Reston Publishing Company, Prentice Hill Co., Virginia. 4. Clare Lowther and Sarah Schultz, (2008), Bright: Architectural Illumination and Light Installations, Frame Publishers. 	<ol style="list-style-type: none"> 2. Egan, David M. (1983). Concepts in Architectural Lighting. McGraw Hill Book Company. 3. Dagostino, F. R. (1978). Mechanical and Electrical Systems in Construction in Architecture. Reston Publishing Company, Prentice Hill Co., Virginia. 4. Clare Lowther and Sarah Schultz, (2008), Bright: Architectural Illumination and Light Installations, Frame Publishers.
<p>Name of Course with Code: AR 1506 Building Services - III</p>	<p>Name of Course with Code: AR 1506 Building Services - III</p>
<p>Syllabus Prior Revision</p>	<p>Syllabus Post Revision</p>
<p>Acoustics: Introduction to the study of acoustics, noise and its types; Standards, requirements and units of sound; Outdoor and indoor noise, Study of behavior of sound in an enclosed space; Absorption of sound, sound absorption co-efficient; Reverberation time; Constructional measures of noise and sound insulation, various sound absorbing materials; Sound amplifying systems; Acoustical design for halls used for drama, music, speech, cinemas and open air theatres. HVAC: Concepts of mechanical heating, ventilation and air conditioning; Definition and classification; Comfort requirements and standards; Design considerations and load calculations, overview of types and working of HVAC systems; Equipment and components of HVAC systems; Forced ventilation; Refrigeration cycles—thermal properties of built elements, evaluation of heat flow; Principles and guidelines for AC ducting design—provisions for fire safety; Air conditioners—types, use, cost, installation and requirement; Energy Conservation techniques; Design of HVAC system.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Egan, D., 1988. Architectural Acoustic. New York: McGraw Hill Book Co. 2. Flynn, J. E. & et al, 1992. Architectural Interior Systems: Lighting, Acoustics and Air Conditioning. s.l.:Van Nostrand Reinhold Co.. 3. Jones, W. P., 1985. Air Conditioning Engineers. s.l.:ELBS(Edward Arnold). 4. Kinsleter, L. E. & Frey, A. R., 1989. Fundamentals of Acoustics. 2 ed. New Delhi: Wiley Eastern Ltd.. 5. Star, B., 1996. Blue Star Guide to comfort Air Conditioning. s.l.: Blue Star Packaged Air Conditioner Division. 	<p>Acoustics: Introduction to the study of acoustics, noise and its types; Standards, requirements and units of sound; Outdoor and indoor noise, Study of behavior of sound in an enclosed space; Absorption of sound, sound absorption co-efficient; Reverberation time; Constructional measures of noise and sound insulation, various sound absorbing materials; Sound amplifying systems; Acoustical design for halls used for drama, music, speech, cinemas and open air theatres. Fire Extinguishing Systems: Extinguishing agents - types of fire; Extinguishing systems - water supplies, fire fighting tanks – wet riser, dry riser; hydrant systems - automatic sprinkler systems; Concept & understanding of fire rating system for various materials & spaces, fire doors, fire resistant materials; Emergency evacuation method and fire exit plan for multistoried building.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Egan, D., 1988. Architectural Acoustic. New York: McGraw Hill Book Co. 2. Kinsleter, L. E. & Frey, A. R., 1989. Fundamentals of Acoustics. 2 ed. New Delhi: Wiley Eastern Ltd.. 3. Templeton, D. & Saunders, D., 1987. Acoustic Design. London: Architectural Press. 4. Hall Fred , Greeno Roger, (2001), Building Services Handbook, 6th edn., Elsevier 5. S.K. Garg, (2001), Water Supply and Sanitary Engineering, Khanna Publishers, Delhi. 6. Singh, Gurcharan - Water Supply and Sanitary Engineering, vol. I &II, Standard publishers & distributors, Delhi.

Name of Course with Code: AR 1702 Interior Design and Detailing	Name of Course with Code: AR 1604 Interior Design I
Syllabus Prior Revision	Syllabus Post Revision
<p>Visualization of interior spaces with respect to light colour and functional aspects; Use of materials in specific conditions of restaurants, cinema, auditorium, planetarium, to condition light and acoustic level working details, collection of materials and market study and case study quality materials and workmanship. Furniture Design: Introduction, history, Designing and detailing of furniture and objects including their sizes, construction joinery and detailing.</p> <p>Material specifications & hardware used, modular options available in market, newer sustainable materials, finishes, costs for seating, tables & tops, counters of various types, dividers, cabinet shelves, showcases, wardrobes, modular kitchens, workstations, partitions, false ceiling, wall panelling.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Jain, Shashi. (1994). Creative Interiors. Management Publishing Company, New Delhi 2. Ching, Frnacies, D.K. (1987). Interior Design Illustrated. Van Nostrand Reinhold, New York 3. Kasu, Ahmed A. (1992). Interior Design. Iquara Publication Limited, Bombay 4. De Chiara, Joseph. (1992). Time Savers Standard for Interior Design and Space Planning. McGraw Hill Publishing Company. 5. Cavataio Christine, (2012), Manual Drafting for Interiors, Wiley. 6. Pile John, (2005), A History of Interior Design, Laurence King Publication 7. Coles John , Naomi House, (2007), Fundamentals of Interior Architecture, Ava Academia 	<p>Visualization of interior spaces with respect to light colour and functional aspects; Use of materials in specific conditions of restaurants, cinema, auditorium, planetarium, to condition light and acoustic level working details, collection of materials and market study and case study quality materials and workmanship. Furniture Design: Introduction, history, Designing and detailing of furniture and objects including their sizes, construction joinery and detailing.</p> <p>References:</p> <ol style="list-style-type: none"> 1. Aronson, J., 1961. The Encyclopaedia of Furniture. New York: Potter Style. 2. Bradley, Q., 2006. Mid-Century Modern: Interiors, Furniture, and Design Details. London: Conran Octopus Interiors. 3. Postell, J., 2007. Furniture Design. New York: Wiley publishers. 4. Smith, E. L., 1985. Furniture: A Concise History (World of Art). London: Thames and Hudson. 5. Blakemore, R. G., 2005. History of Interior Design and Furniture: From Ancient Egypt to Nineteenth-Century Europe. New York: Wiley publishers. 6. Ching, F. & Corky B., 1995. Interior Design illustrated. New York: Wiley & Sons. 7. Dodsworth, S., 2009. The fundamental of Interior Design. Ava Academia 8. John, P., 2005. History of Interior Design. London: Laurence King Publication

Courses with no change in course content but change of Course Nomenclature / Code

Old Course Nomenclature / Course Code	New Course Nomenclature / Course Code
AR 1106 Visual Arts & Basic Design - I	AR 1106 Visual Arts I
AR 1206 Visual Arts & Basic Design - II	AR 1206 Visual Arts II
AR 1308 Computer Aided Design	AR 1307 Computer Applications in Arch.-II
AR 1403 Surveying and Levelling	AR 1308 Surveying and Levelling
AR 1503 Building Codes & Byelaws	AR 1403 Building Codes & Byelaws
AR 1507 Climate Responsive Architecture	AR 1303 Climate Responsive Architecture

AR 1606 Specification & Estimation	AR 1503 Specification & Estimation
AR 1607 Human Settlement Planning	AR 1507 Human Settlement Planning I
AR 1703 Working Drawing II	AR 1802 Working Drawing II
AR 1802 Professional Practice	AR 1902 Professional Practice
AR 1804 Research Methodology	AR 1705 Research Methodology
AR 1902 Elective I	AR 1805 Elective I