

Maulana Azad National Institute of Technology, Bhopal – 462003
DEPARTMENT OF ARCHITECTURE & PLANNING

SCHEME FOR B. ARCH.
(Revised December 2020)

FIRST SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 1101	Architectural Design Project - 1	Theory (6 Hrs)	1	-	-	6	10
ARC 1102	Building Materials & Construction - 1	Theory	1	-	-	4	7
ARC 1103	Architectural Drawing - 1	Theory	2	-	4	-	4
ARC 1104	History of Art & Culture	Theory	1	-	2	-	2
ARC 1105	Environment & Ecology	Theory	2	-	-	-	2
ARC 1106	Computer Applications - 1	Viva	1	-	3	-	3
SPR 1107	Sports / Digital India Program	-	-	-	2	-	1
Total Hours = 29			8	-	11	10	29
Total Credits (Cumulative)							29

Note: Compulsory study trip / tour in Architectural Design subject as a part of studio.

SECOND SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 1201	Architectural Design Project-2	Theory (6 Hrs)	1	-	-	6	10
ARC 1202	Building Materials & Construction – 2	Theory	1	-	-	4	7
ARC 1203	Architectural Drawing – 2	Theory	2	-	4	-	4
ARC 1204	History of Architecture – 1	Theory	1	-	2	-	2
ARC 1205	Workshop & Model-Making	Viva	-	-	4	-	2
CE 1206	Structural Mechanics	Theory	1	1	-	-	2
SPR 1207	Yoga/ Swatchha Bharat Abhiyan	-	-	-	2	-	1
Total Hours = 29			6	1	12	10	28
Total Credits (Cumulative)							57

Note: Compulsory study trip / tour in Architectural Design subject as a part of studio.

THIRD SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 2101	Architectural Design Project - 3	Viva	1	-	-	6	10
ARC 2102	Building Materials & Construction - 3	Theory	1	-	-	4	7
ARC 2103	History Architecture - 2	Theory	1	-	2	-	2
ARC 2104	Climatology	Theory	1	-	2	-	2
ARC 2105	Architectural Communication Skill	Viva	1	-	3	-	3
CE 2106	Structure - 1	Theory	1	1	-	-	2
CE 2107	Surveying	Theory	1	-	4	-	3
Total Hours = 29			7	1	11	10	29
Total Credits (Cumulative)							86

Note: Compulsory study trip / tour in Architectural Design subject as a part of studio.

FOURTH SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 2201	Architectural Design Project - 4	Viva	1	-	-	6	10
ARC 2202	Building Materials & Construction - 4	Theory	1	-	-	4	7
ARC 2203	Theory of Architectural Design	Theory	1	-	2	-	2
ARC 2204	Building Services - 1 (Water Supply & Sanitation)	Theory	1	-	2	-	2
ARC 2205	Landscape - 1	Viva	2	-	2	-	3
ARC 2206	Computer Applications - 2	Viva	1	-	3	-	3
CE 2207	Structure - 2	Theory	1	1	-	-	2
Total Hours = 28			8	1	9	10	29
Total Credits (Cumulative)							115

Note: Compulsory study trip / tour in Architectural Design subject as a part of studio.

FIFTH SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 3101	Architectural Design Project - 5	Viva	1	-	-	6	10
ARC 3102	Building Materials & Construction - 5	Theory	1	-	-	4	7
ARC 3103	Acoustics	Theory	1	-	2	-	2
ARC 3104	Quantity Surveying, Specifications and Valuation	Theory	2	-	2	-	3
ARC 3105	Computer Applications - 3	Viva	1	-	2	-	2
CE 3106	Structure - 3	Theory	1	2	-	-	3
EE 3107	Building Services - 2 (Electrical Services)	Theory	1	2	-	-	3
Total Hours = 28			8	4	6	10	30
Total Credits (Cumulative)							145

Note: Compulsory study trip / tour in Architectural Design subject as a part of studio.

SIXTH SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC3201	Architectural Design Project - 6	Viva	1	-	-	6	10
ARC3202	Building Materials & Construction - 6	Theory	1	-	-	4	7
ARC 3203	Computer Applications - 4 (Building Information Modeling)	Viva	1	-	2	-	2
CE 3204	Structure - 4	Theory	1	2	-	-	3
ME 3205	Building Services - 3 (Mechanical Services)	Theory	1	2	-	-	3
	Program Elective - 1 (GROUP - A)	Theory	3	-	-	-	3
	Departmental Elective (GROUP - B)	Theory	3	-	-	-	3
Total Hours = 27			11	4	2	10	31
Total Credits (Cumulative)							176

Note: Compulsory study trip / tour in Architectural Design subject as a part of studio.

SEVENTH SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 4101	Architectural Design Project - 7	Viva	1	-	-	6	10
ARC 4102	Working Drawing	Viva	1	-	4	-	3
ARC 4103	Project Management	Theory	3	-	-	-	3
ARC 4104	Town Planning	Theory	3	-	-	-	3
ARC 4105	Landscape - 2	Viva	2	-	2	-	3
	Program Elective - 2 (GROUP - A)	Viva	1	-	4	-	3
	Open Elective (GROUP - C)	Theory	3	-	-	-	3
Total Hours = 30			14	-	10	6	28
Total Credits (Cumulative)							204

Note: Compulsory study trip / tour in Architectural Design subject as a part of studio.

EIGHTH SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 4201	Professional Training	Viva	-	-	-	-	26
Total Credits (Cumulative)							230

NINTH SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 5101	Architectural Design Project - 8	Viva	1	-	-	6	10
ARC 5102	Urban Design	Theory	2	-	2	-	3
ARC 5103	Interior Design	Viva	1	-	4	-	3
ARC 5104	Professional Practice and Building Bye Laws	Theory	3	-	-	-	3
ARC 5105	Research Principles and Dissertation	Viva	1	-	2	-	2
HUM 5104	Building Economics & Sociology	Theory	3	-	-	-	3
Total Hours = 25			11	-	8	6	24
Total Credits (Cumulative)							254

Note: Compulsory study trip / tour in Architectural Design subject as a part of studio.

TENTH SEMESTER:

Course Number	Subject	Theory / Studio / Lab Exam	Scheme of Studies Periods per week				Total Credits
			L	T	P	Studio	
ARC 5201	Design Thesis	Viva	-	-	-	10	15
	Program Elective - 3 (GROUP - A)	Theory	3	-	2	-	4
	Program Elective - 4 (GROUP - A)	Viva	3	-	2	-	4
	Program Elective - 5 (GROUP - A)	Viva	3	-	2	-	4
ARC 5202	General Proficiency	Viva	-	-	-	-	1
Total Hours = 25			9	-	6	10	28
Total Credits (Cumulative)							282

List of Electives (Architecture and Planning)

List of Electives (GROUP - A) Elective - 1	
ARC 301	Building codes and byelaws
ARC 302	Modern and Contemporary World Architecture
ARC 303	Modern and Contemporary Indian Architecture
ARC 304	Barrier free Architecture
ARC 305	Hill Architecture
ARC 306	Evolution of human settlements
ARC 307	Mass housing design and standards
ARC 308	Advanced theory of design
ARC 309	Ekistics
ARC 310	Appropriate technology
ARC 311	Architectural Pedagogy
ARC 312	Research Methodologies
ARC 313	Research Techniques in Architecture
ARC 314	Disaster management
ARC 315	Architectural Conservation
ARC 316	Environmental planning
ARC 317	Green building
List of Electives (GROUP - A) Elective - 2	
ARC 321	Computer programming
ARC 322	Digital art
ARC 323	Set design
ARC 324	Photography
ARC 325	Painting
ARC 326	Product design
ARC 327	Graphic design
ARC 328	Furniture design
ARC 329	CAD customization
List of Electives (GROUP - A) Elective - 3	
ARC 331	Advanced building construction and technology
ARC 332	Institutional building and campus planning
ARC 333	Valuation
ARC 334	Environmental impact assessment
ARC 335	Architectural literary heritage of India
ARC 336	Rural planning
ARC 337	Urban Housing
ARC 338	Sustainable building design
ARC 339	Architectural Journalism
ARC 340	Real estate development
ARC 341	Urban and regional planning
ARC 342	Remote Sensing and GIS

ARC 343	Traffic and transportation planning
ARC 344	Infrastructure planning and design
ARC 345	Vernacular and traditional Indian architecture
ARC 346	Color theory and its applications
ARC 347	Earthquake resistant architecture
ARC 348	Ergonomics
ARC 349	Creative Thinking
List of Electives (GROUP - A) Elective - 4	
ARC 351	Companies laws
ARC 352	Entrepreneurship skills for architects
ARC 353	Office management
ARC 354	Ideation
ARC 355	Leadership development Business environment
ARC 356	NGO administration
ARC 357	Marketing management and skills
ARC 358	Human resource management
ARC 359	Art Appreciation
ARC 360	Cultural expressions in architecture
ARC 361	Animation
List of Electives (GROUP - A) Elective - 5	
ARC 371	Contemporary building materials
ARC 372	Services in tall buildings
ARC 373	Building Maintenance
ARC 374	Glass Architecture
ARC 375	Anthropology and Architecture
ARC 376	Security systems
ARC 377	Hospital systems and services
ARC 378	Hotel planning and services
ARC 379	Intelligent buildings
ARC 380	Low cost building design and techniques
ARC 381	Environmental codes and energy ratings
ARC 382	Modular coordination
ARC 383	Auditorium, acoustics, systems and services
ARC 384	High rise buildings
ARC 385	Steel architecture and design
ARC 386	Advanced structural systems
ARC 387	Industrial building systems
List of Electives (GROUP - B)	
PLN 301	Sustainable Development
PLN 302	Future Settlements
PLN 303	Metropolitan Planning, Development and Management
PLN 304	Contemporary Planning Practice
PLN 305	Rural Development and Management
PLN 306	Disaster Risk Mitigation and Management
PLN 307	Big Data in Urban Planning

PLN 308	Freight Transport and Logistics
PLN 309	Tourism Planning
PLN 310	Sustainable and Resilient Cities
PLN 311	Inclusive cities
PLN 312	Smart cities
PLN 313	Infrastructure Planning, Development and Management
PLN 314	Human Settlements and Climate change

Group - C	
CHE 7502	Mechanical Operations
CHE 7504	Chemical Reaction Engineering
CE 1504	Transportation Engineering – 1
CE 1703	Transportation Engineering – 2
CS 5503	Machine Learning
CS 5703	Digital Image Processing
EC 4305	Instrumentation & Control
EC 4503	Communication Systems
EE 3304	EMEC-1
EE 3305	Power Electronics
ME 2303	Material Science & Engineering
ME 2702	Refrigeration & Air Conditioning
MM 6305	Physical Metallurgy
MM 6704	Fracture & Failure Analysis