



Departmental Circular

- Referenced:
1. R-44 – Empowering Academic Council to approve teaching and examination scheme, syllabi, etc published vide notification No. NU-442 dated 27.01.2004 (as amended)
 2. Notification No. NU-67 dated 11.05.2017- Introduction of Teaching & Examination Scheme and Syllabus of Semester- VII and VIII of B.Arch programme
 3. Notification No. NU-177 dated 20.12.2018- Revision in Teaching and Examination Scheme of Semester- 1 to X of B.Arch programme due to offering of Related Study Programme (RSP) as option
 4. Resolution No. 3(C)- Faculty of Architecture & Planning meeting – 03.03.2020
 5. Resolution No. 9 (C)– Academic Council meeting – 16.06.2020
 6. Approval of the Director General on note-dated
 7. Notification No.- NU/AC/AC-160620/9 (C)/20-24 Dated- 24.07.2020
 8. Reference Notification No. NU/AC/AC-160620/9(C)/20

Sub: Revision in the Teaching and Examination Scheme and Syllabi of Semester- VII to X of B.Arch Programme

It is hereby notified for information of all concerned that the Academic Council in its meeting held on 16.06.2020 under resolution No. 9(C) in exercise of powers conferred upon it by the Board of Governors under regulation mentioned at serial 1 above and taking into consideration the recommendations of the Faculty of Architecture & Planning, has resolved to approve revision in the teaching and examination scheme and syllabi of semester- VII to X of B.Arch. programme to be made effective for the students to be registered in the respective semester in the academic year 2020-21 only due to covid- 19 pandemic.

- i. Swamping of all courses of 'Semester- VII' to Semester-VIII
- ii. Amendment in the Institute elective courses due to updation of course codes, credit and examination scheme

It is further notified that the Director General was authorized to approve the revised document incorporating the suggestions made by the Academic Council and the final document as approved by the Director General is attached herewith as **Appendix-A.**


Director,



Encl. Appendix- A

To,

1. All Faculty Members, Institute of Architecture and Planning, Nirma University
2. Office Superintendent, Institute of Architecture and Planning, Nirma University
3. Exam Section, Institute of Architecture and Planning, Nirma University
4. Library, Institute of Architecture and Planning, Nirma University

NU/AC/AC-160620/9(C)/20-24
Date: 24.07.2020



NOTIFICATION

- Read: 1. R-44 – empowering Academic Council to approve teaching & examination scheme, syllabi, etc published vide notification No. NU-442 dated 27.01.2004 (as amended)
2. Notification No. NU-67 dated 11.05.2017 - Introduction of Teaching & Examination Scheme and Syllabus of Semester-VII and VIII of B.Arch. programme
3. Notification No. NU-177 dated 20.12.2018 - Revision in Teaching and Examination Scheme of Semester-I to X of B.Arch. programme due to offering of Related Study Programme (RSP) as option
4. Resolution No. 3(C) – Faculty of Architecture & Planning meeting – 03.03.2020
5. Resolution No. 9(C)– Academic Council meeting – 16.06.2020
6. Approval of the Director General on note-dated

Sub: Revision in the Teaching and Examination Scheme and Syllabi of Semester-VII to X of B.Arch. programme

It is hereby notified for information of all concerned that the Academic Council in its meeting held on 16.06.2020 under resolution No. 9(C) in exercise of powers conferred upon it by the Board of Governors under regulation mentioned at serial 1 above and taking into consideration the recommendation of the Faculty of Architecture & Planning, has resolved to approve *revision* in the Teaching and Examination Scheme and Syllabi of Semester-VII to X of B.Arch. programme, to be made effective for the students to be registered in respective semester in the academic year 2020-21 only due to the COVID-19 Pandemic:

- i. Swapping of all courses of 'Semester-VII' to Semester-VIII
- ii. Amendment in the Institute Elective courses due to updation of course codes, credit and examination scheme

It is further notified that the Director General was authorized to approve the revised document incorporating the suggestions made by the Academic Council and the final document as approved by the Director General is attached herewith as *Appendix-A*.


Executive Registrar

Encl.: Appendix-A [Pages 1 to 58]



To,
1. Dean, Faculty of Architecture & Planning
2. Dy. Registrar (Exam)

Copy to,
1. Exam Sec.
2. OS
3. Library
4. P.A. to ER

c.f.w.cs. to Director General

**NIRMA UNIVERSITY
INSTITUTE OF ARCHITECTURE & PLANNING
TEACHING AND EXAMINATION SCHEME**

**Bachelor of Architecture
SEMESTER VIII**

| Course Code | Name of the Course | Teaching Scheme | | | | Scheme of Examination | | | | |
|---------------------------|--------------------------------|--|----------|-------------|---------------|-----------------------|----------|---------------------|----------|----------|
| | | | | | | Duration | | Component Weightage | | |
| | | L | T | P | C | SEE | LPW/PW | CE | LPW/PW | SEE |
| Core course | | | | | | | | | | |
| 2AR853 | Urban Context Studio | - | - | 12 | 8 | - | - | 0.6 | 0.4 | - |
| 2AR854 | Research Seminar | 2 | - | 1.5 | 3 | 3 | - | 0.6 | 0.4 | - |
| 2AR855 | Introduction to Urban Planning | 1 | - | 3 | 3 | 3 | - | 0.4 | 0.2 | 0.4 |
| 2ARS08 | Related Study Programme # | (2/3 Weeks, Block course) (Minimum 21 days X 8 Hrs. = 168 Hrs.) | | | 3 | - | - | - | 1 | - |
| Institute Elective | | | | | | | | | | |
| 2ARE* | Elective* | 2 | - | 1.5 | 3 | - | - | 0.6 | 0.4 | - |
| 2ARE* | Elective* | 2 | - | 1.5 | 3 | - | - | 0.6 | 0.4 | - |
| Total | | 7 | - | 19.5 | 20/23S | - | - | - | - | - |

L: Lecture,

T: Tutorial,

P: Practical,

C: Credit

CE: Continuous Evaluation,

LPW: Lab/Project/Studio Work,

SEE: Semester End Examination

#4 RSP is to be completed during the entire duration of B.Arch programme out of which 2 RSP is to be completed before registration in Semester V and remaining 2 RSP before registration in Semester X.

\$ Credit of RSP will be given to those students who registers for RSP in the respective semester

* **Institute Elective Courses** (students have to register in course not taken in the previous semesters)

NIRMA University
Institute of Architecture and Planning
Bachelor of Architecture
Institute Elective Annexure-I

| | | | |
|----------|----------|------------|----------|
| L | T | P | C |
| 2 | - | 1.5 | 3 |

| | |
|---------------------|--|
| Course Code | 2ARE71 |
| Course Title | Introduction to Infrastructure Planning |

Course Learning Outcomes (CLO):

At the end of the course, students will be able to –

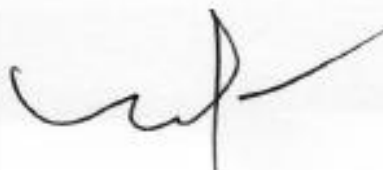
- Understand the basic concepts related to lifeline infrastructure and their significance to human settlements, environment, public health and hygiene
- Inculcate knowledge about storm water drainage system, water supply system, waste water drainage system, solid waste management and other services
- Apply the standards and relate to the concept of demand, supply, and management

Syllabus: 15 weeks (3.5 hours/week)

Total Teaching hours: 52.5Hr

| Unit No. | Syllabus: Topic | Sub Topic | Teaching hours: (Weeks) |
|-----------------|--------------------------------|--|--------------------------------|
| I. | Introduction to Basic Concepts | Role of the planner in planning of utilities and services Implications of utilities and services planning on public health and environmental protection Familiarizing with different manuals, codes and standards | 7 hours |
| II. | Water Supply Systems | Water and health Surface and ground water sources, quality and quantity, location of sources and water intakes, area requirements of the components of water intakes Water requirement for different land uses, factors affecting water demand, per capita requirement and variations Water treatment system, location and space requirements Components of water distribution systems, Planning for Various uses, Storage and supply network Policy for urban and rural water supply | 7 hours |
| III. | Storm Water Drainage System | Definition of Hydrology Classification, hydrological cycle, urban water cycle Types precipitation and measurement, rain fall | 7 hours |

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|------|---------------------------------|---|------------|
| | | analysis, surface water runoff, measurements of runoff, watershed Flood frequencies, and flood protection measures in urban areas, layout and design of storm water system, rain water harvesting systems | |
| IV. | Sanitation and Sewerage Systems | Sanitation and public health Off-site and on-site sanitation and technology Low cost appropriate technologies for sanitation Disposal systems: Conventional and Alternate Standards for Indian cities: Sanitary sewer system network and layout planning, Sewage disposal methods, location criteria and capacity Financing and cost recovery for sewer system Social stigma associated with sanitation: use and disposal Public toilets National urban Sanitation Policy (City Sanitation Plans) | 7 hours |
| V. | Solid Waste Management | Solid waste management for Indian cities, quantity of solid waste and its character Methods of solid waste management, collection, transportation and disposal Land filling and composting, and other methods of pre and post treatment, location and cost aspects of different methods of solid waste disposal systems Community participation and involvement of NGOs in efficient solid waste management | 7 hours |
| VI. | Other Services | Telecommunication Services- Locational criteria for mobile phone towers Gas and oil pipelines Electric substations requirements, capacity, location and space requirement | 7 hours |
| VII. | Service Delivery and Management | Organizations- jurisdictions and financing PPP arrangements and government's role Distribution, companies and regulatory processes Case study on good practice, innovative methods for technology, service delivery, financing and regulation in all the above cases | 10.5 hours |

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Suggested Readings:

- CPHEEO (2013) "Manual on Sewerage and Sewage Treatment" to be retrieved from <http://cpheeo.nic.in/Sewerage.aspx>
- Garg, S K (2010) "Water Supply Engineering" Khanna Publishers
- IDFC-Government of India (2011) "India Infrastructure Report: Water: Policy and Performance for Sustainable Development" to be retrieved from <https://www.idfc.com/pdf/report/IIR-2011.pdf>
- IDFC-Government of India (2007) "India Infrastructure Report: Rural Infrastructure" to be retrieved from <https://www.idfc.com/pdf/report/IIR-2007.pdf>
- IDFC-Government of India (2006) "India Infrastructure Report: Urban Infrastructure" to be retrieved from <https://www.idfc.com/pdf/report/IIR-2006.pdf>
- Morgan, Charles S (2010) "Regulation and the Management of Public Utilities" UK: Gale
- Peavy, Howard S., Rowe, Donald R. & Tchobanoglous, George (2013) "Environmental Engineering" Tata McGraw Hill
- Town and Country Planning Organisation (2015) "Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines" Ministry of Urban Development, Government of India; to be retrieved from <http://moud.gov.in/upload/uploadfiles/files/URDPFI%20Guidelines%20Vol%201.pdf>
- Kundu, Amitabh (1991) "Micro Environment in Urban Planning-Access of Poor to Water Supply and Sanitation" EPW, September, 14
- Mohan, Rakesh (2003) "Infrastructure Development in India: Emerging Challenges" Paper presented at Annual Bank Conference on Development Economics, Bangalore
- Shreyaskar, Pankaj K P (2016) "Drawing on the Right to Live with Human Dignity: Contours of Access to Water and Sanitation in India" EPW, December.

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