



SHRI VASANTRAO BANDUJI PATIL TRUST'S

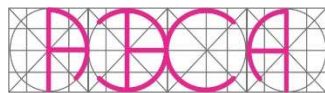
**APPASAHEB BIRNALE COLLEGE OF  
ARCHITECTURE, SANGLI**

(Approved by AICTE, C.O.A New Delhi, Affiliated to Shivaji University Kolhapur)  
District – Sangli 416416

## **Criterion VII**

### **Institutional values and Best practices**

#### **Key Indicator 7.2 Best Practices**



SHRI VASANTRAO BANDUJI PATIL TRUST'S

## **APPASAHEB BIRNALE COLLEGE OF ARCHITECTURE, SANGLI**

(Approved by AICTE, C.O.A New Delhi, Affiliated to Shivaji University Kolhapur)  
South Shivajinagar, Sangli Miraj Road, Sangli-416146. Ph. No- (0233) 2320294, 2322336.  
Website- [www.abcasangli.edu.in](http://www.abcasangli.edu.in) Affiliated: Shivaji University Kolhapur

**Principal: - Dr. Arundhati P Wategave Ph.D.**

7.2.1 Describe two best practices successfully implemented by the institution as per the NAAC format provided.

### **BEST PRACTICE 2**

#### **SWAYAM- NPTEL Online Certification Courses**

##### **1. Objectives of the Practice**

- To support students and faculty members in the process of strengthening their knowledge and career prospects by introducing trustworthy, cost effective, and flexible sources of online education.
- To enable faculty and students to gain advanced technological and subject knowledge through video lectures prepared by IITs and IISc and IIMs
- To encourage faculty and students to learn and to design value added courses on the lines of these courses.
- To promote continuous professional development through self-learning and life-long learning.
- To impart life skills, develop the personality and communication skills.



**V.C. PRINCIPAL,  
APPASAHEB BIRNALE COLLEGE<sup>2</sup>  
OF ARCHITECTURE, SANGLI.**


SWAYAM - NPTEL LOCAL CHAPTER

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Coordinated By : IIT MADRAS

**APPASAHEB BIRNALE COLLEGE OF ARCHITECTURE SANGLI**

APPASAHEB BIRNALE COLLEGE OF ARCHITECTURE SANGLI,  
SOUTH SHIVAJI NAGAR NEAR INCOME TAX OFFICE SANGLI,  
MIRAJ ROAD SANGLI CITY S.O, MIRAJ, SANGLI, MAHARASHTRA,  
416416  
SANGLI  
Url: <http://www.abcmangli.org/>



SPOC Name - PROF. SHANTANU PRAKASH JAGTAP

Designation - ASST. PROFESSOR, MASTERS

Partnering since - Dec-2018

College Id - 2322 Institute Type - ENGINEERING, TECHNOLOGY AND MANAGEMENT

NPTEL is very happy to be associated with APPASAHEB BIRNALE COLLEGE OF ARCHITECTURE SANGLI institute and its students. We are thankful to PROF. SHANTANU PRAKASH JAGTAP for being a pillar of support in NPTEL initiatives.

Course Run	Present	Gold	Elite	Silver	Successful	Participation	Topper	NPTEL Stars
Jan-Apr 2021	5	0	2	1	2	0	0	-
Jan-Dec 2020	1	0	1	0	0	0	0	-

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APPASAHEB BIRNALE COLLEGE OF ARCHITECTURE SANGLI

Spoc Details Course Wise Toppers Details

Course Wise

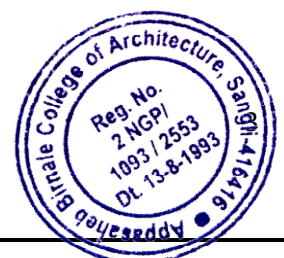
S.no	Course Name	Present	Gold	Elite	Silver	Success	Participation
1	Sustainable Architecture	4	0	1	1	2	0
2	Architectural Conservation and Historic Preservation	1	0	1	0	0	0

APPASAHEB BIRNALE COLLEGE OF ARCHITECTURE SANGLI

Spoc Details Course Wise Toppers Details

Course Wise

S.no	Course Name	Present	Gold	Elite	Silver	Success	Participation
1	Building Materials and Composites	1	0	1	0	0	0



**Appasaheb Birnale College of Architecture, Sangli**  
**( SWAYAM NPTEL Courses Enrolled From 2017 – 2022 )**

Sr.No	Name of The Course	Duration	Number of Students Enrolled to the course	Link to Support
<b>List of NPTEL Architecture courses Enrolled</b>				
01	Urban Services Planning	03 weeks	01	<a href="https://archive.nptel.ac.in/courses/124/105/124105163/">https://archive.nptel.ac.in/courses/124/105/124105163/</a>
02	Modern Indian Architecture	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107161/">https://archive.nptel.ac.in/courses/124/107/124107161/</a>
03	International Studies in Vernacular Architecture	04 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107162/">https://archive.nptel.ac.in/courses/124/107/124107162/</a>
04	Engineering/Architectural Graphics – part II – Isometric and Axonometric Drawings	04 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107159/">https://archive.nptel.ac.in/courses/124/107/124107159/</a>
05	Environmental Impact Assessment	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107160/">https://archive.nptel.ac.in/courses/124/107/124107160/</a>
06	Urban utilities Planning : Water Supply, Sanitation and Drainage	12 Weeks	02	<a href="https://archive.nptel.ac.in/courses/124/105/124105158/">https://archive.nptel.ac.in/courses/124/105/124105158/</a>
07	Introduction to Urban Planning	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107158/">https://archive.nptel.ac.in/courses/124/107/124107158/</a>
08	Strategies for Sustainable Design	12 Weeks	07	<a href="https://archive.nptel.ac.in/courses/124/106/124106157/">https://archive.nptel.ac.in/courses/124/106/124106157/</a>
09	Engineering/Architectural Graphics _ part I _ Orthographic projection	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107157/">https://archive.nptel.ac.in/courses/124/107/124107157/</a>
10	Building Materials and Composites	08 weeks	01	<a href="https://archive.nptel.ac.in/courses/124/105/124105013/">https://archive.nptel.ac.in/courses/124/105/124105013/</a>
11	Environmental Soil Chemistry	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/105/124105014/">https://archive.nptel.ac.in/courses/124/105/124105014/</a>
12	Structural System in Architecture	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/105/124105015/">https://archive.nptel.ac.in/courses/124/105/124105015/</a>
13	Urban Land use and transportation planning	12 Weeks	02	<a href="https://archive.nptel.ac.in/courses/124/105/124105016/">https://archive.nptel.ac.in/courses/124/105/124105016/</a>
14	Sustainable Architecture	12 Weeks	03	<a href="https://archive.nptel.ac.in/courses/124/107/124107011/">https://archive.nptel.ac.in/courses/124/107/124107011/</a>
15	Structure, Form and Architecture : The Synergy	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107012/">https://archive.nptel.ac.in/courses/124/107/124107012/</a>
16	Disaster Recovery And Build Back Better	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107010/">https://archive.nptel.ac.in/courses/124/107/124107010/</a>
17	Introduction to History of Architecture in India	04 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/106/124106009/">https://archive.nptel.ac.in/courses/124/106/124106009/</a>
18	Urban governance and Development Management (UGDM)	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107007/">https://archive.nptel.ac.in/courses/124/107/124107007/</a>

19	User Interface Design	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107008/">https://archive.nptel.ac.in/courses/124/107/124107008/</a>
20	Culturally Responsive Built Environments	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107004/">https://archive.nptel.ac.in/courses/124/107/124107004/</a>
21	Contemporary Architecture and Design	08 Weeks	10	<a href="https://archive.nptel.ac.in/courses/124/107/124107005/">https://archive.nptel.ac.in/courses/124/107/124107005/</a>
22	Role of Craft and Technology in Interior - Architecture	08 Weeks	03	<a href="https://archive.nptel.ac.in/courses/124/107/124107006/">https://archive.nptel.ac.in/courses/124/107/124107006/</a>
23	Architectural Acoustics	08 Weeks	04	<a href="https://archive.nptel.ac.in/courses/124/105/124105004/">https://archive.nptel.ac.in/courses/124/105/124105004/</a>
24	Architectural Conservation And Historic Preservation	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/105/124105003/">https://archive.nptel.ac.in/courses/124/105/124105003/</a>
25	Landscape Architecture and Site Planning - Basic Fundamentals	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/105/124105001/">https://archive.nptel.ac.in/courses/124/105/124105001/</a>
26	Visual Communication Design for Digital Media	04 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107002/">https://archive.nptel.ac.in/courses/124/107/124107002/</a>
27	Housing Policy & Planning	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107001/">https://archive.nptel.ac.in/courses/124/107/124107001/</a>
28	Research Methodology	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/127/106/127106227/">https://archive.nptel.ac.in/courses/127/106/127106227/</a>
29	Advanced computer architecture	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/106/102/106102229/">https://archive.nptel.ac.in/courses/106/102/106102229/</a>

### **List of NPTEL multidisciplinary courses Enrolled**

30	Medical Biomaterials	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/102/106/102106057/">https://archive.nptel.ac.in/courses/102/106/102106057/</a>
31	Medicinal Chemistry	12 weeks	01	<a href="https://archive.nptel.ac.in/courses/104/106/104106106/">https://archive.nptel.ac.in/courses/104/106/104106106/</a>
32	Entrepreneurship Essentials	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/127/105/127105007/">https://archive.nptel.ac.in/courses/127/105/127105007/</a>
33	Basic Course in Optics	04 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107002/">https://archive.nptel.ac.in/courses/124/107/124107002/</a>
34	Principles & Application of Building Science	04 Weeks	06	<a href="https://archive.nptel.ac.in/courses/124/107/124107005/">https://archive.nptel.ac.in/courses/124/107/124107005/</a>
35	Project Management	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/110/104/110104073/">https://archive.nptel.ac.in/courses/110/104/110104073/</a>
36	Wild life Ecology	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/102/104/102104073/">https://archive.nptel.ac.in/courses/102/104/102104073/</a>
37	Ecology & Environment	08 Weeks	02	<a href="https://archive.nptel.ac.in/courses/106/104/106104180/">https://archive.nptel.ac.in/courses/106/104/106104180/</a>
38	Analytical Chemistry	12 Weeks	03	<a href="https://archive.nptel.ac.in/courses/104/105/104105084/">https://archive.nptel.ac.in/courses/104/105/104105084/</a>
39	Experimental Biotechnology	04 Weeks	02	<a href="https://archive.nptel.ac.in/courses/102/103/102103047/">https://archive.nptel.ac.in/courses/102/103/102103047/</a>
40	Qualitative Research Methods and Research Writing	12 Weeks	01	<a href="https://archive.nptel.ac.in/courses/127/105/109105115/">https://archive.nptel.ac.in/courses/127/105/109105115/</a>
41	Introduction to Research writing	04 Weeks	01	<a href="https://archive.nptel.ac.in/courses/110/105/110105091/">https://archive.nptel.ac.in/courses/110/105/110105091/</a>
42	Introduction to Geographic Information System.	04 Weeks	01	<a href="https://archive.nptel.ac.in/courses/105/107/105107155/">https://archive.nptel.ac.in/courses/105/107/105107155/</a>

43	Visual Communication Design for Digital Media	04 Weeks	01	<a href="https://archive.nptel.ac.in/courses/124/107/124107002/">https://archive.nptel.ac.in/courses/124/107/124107002/</a>
44	Wildlife Conservation	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/102/104/102104068/">https://archive.nptel.ac.in/courses/102/104/102104068/</a>
45	Remote Sensing & GIS	03 Weeks	01	<a href="https://archive.nptel.ac.in/courses/105/101/105101221/">https://archive.nptel.ac.in/courses/105/101/105101221/</a>
46	Ecology & Environment	08 Weeks	02	<a href="https://archive.nptel.ac.in/courses/127/106/127106004/">https://archive.nptel.ac.in/courses/127/106/127106004/</a>
47	Big data Computing	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/106/104/106104189/">https://archive.nptel.ac.in/courses/106/104/106104189/</a>
48	Building Materials & Composites	08 Weeks	02	<a href="https://archive.nptel.ac.in/courses/124/105/124105013/">https://archive.nptel.ac.in/courses/124/105/124105013/</a>
49	Disaster Recovery & Build Back Better	08 Weeks	02	<a href="https://archive.nptel.ac.in/courses/124/107/124107010/">https://archive.nptel.ac.in/courses/124/107/124107010/</a>
50	Technologies for Clean and Renewable Energy Production	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/103/107/103107157/">https://archive.nptel.ac.in/courses/103/107/103107157/</a>
51	Introduction to Polymer Science	08 Weeks	01	<a href="https://archive.nptel.ac.in/courses/104/105/104105124/">https://archive.nptel.ac.in/courses/104/105/104105124/</a>
52	Introduction to Internet of Things	12 weeks	01	<a href="https://archive.nptel.ac.in/courses/106/105/106105166/">https://archive.nptel.ac.in/courses/106/105/106105166/</a>

#### List of SWAYAM courses Enrolled

53	Academic Writing	15 Weeks	01	<a href="https://onlinecourses.swayam2.ac.in/cec22_ge44/preview">https://onlinecourses.swayam2.ac.in/cec22_ge44/preview</a>
54	Basics of Spanish Language and Culture-I	16 Weeks	01	<a href="https://onlinecourses.swayam2.ac.in/nou23_lg09/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/nou23_lg09/preview?user_email=architectspjagtap@gmail.com</a>
55	Research Ethics using Research Methodology: Creating a New Global Education Curriculum	16 Weeks	01	<a href="https://onlinecourses.swayam2.ac.in/aic21_ge02/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/aic21_ge02/preview?user_email=architectspjagtap@gmail.com</a>
56	Entrepreneur skills	15 Weeks	01	<a href="https://swayam.gov.in/explorer?searchText=Basics+of+Spanish+Language+and+Culture-I">https://swayam.gov.in/explorer?searchText=Basics+of+Spanish+Language+and+Culture-I</a>
57	Indian Vastushastra	15 Weeks	01	<a href="https://onlinecourses.swayam2.ac.in/cec22_ar03/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/cec22_ar03/preview?user_email=architectspjagtap@gmail.com</a>
58	MPSE		01	<a href="https://onlinecourses.swayam2.ac.in/cec22_mg09/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/cec22_mg09/preview?user_email=architectspjagtap@gmail.com</a>
59	Urban Disaster Risk Mitigation & Climate Resilient Development	15 Weeks	01	<a href="https://onlinecourses.swayam2.ac.in/cec22_ge30/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/cec22_ge30/preview?user_email=architectspjagtap@gmail.com</a>
60	Pedagogy of Mathematics	16 Weeks	01	<a href="https://onlinecourses.swayam2.ac.in/nou23_ed16/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/nou23_ed16/preview?user_email=architectspjagtap@gmail.com</a>

61	School Counselling	15 Weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/cec23_ed04/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/cec23_ed04/preview?user_email=architectspjagtap@gmail.com</a>
62	Building Cost Estimation Simplified	08 Weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/nou21_ce06/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/nou21_ce06/preview?user_email=architectspjagtap@gmail.com</a>
63	Feature Writing	16 Weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/nou23_lg29/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/nou23_lg29/preview?user_email=architectspjagtap@gmail.com</a>
64	City & Metropolitan Planning	15 Weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/cec23_ar01/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/cec23_ar01/preview?user_email=architectspjagtap@gmail.com</a>
65	Basics of Remote sensing, GIS & GNSS technology and their applications	15 Weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/aic22_ge16/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/aic22_ge16/preview?user_email=architectspjagtap@gmail.com</a>
66	Concrete Technology	12 Weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/nou23_ce02/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/nou23_ce02/preview?user_email=architectspjagtap@gmail.com</a>
67	Child Development	12 Weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/cec22_ge17/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/cec22_ge17/preview?user_email=architectspjagtap@gmail.com</a>
68	Abnormal Psychology	12 Weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/cec23_hs20/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/cec23_hs20/preview?user_email=architectspjagtap@gmail.com</a>
69	MHD -Hindi Literature	16 weeks	0 1	<a href="https://onlinecourses.swayam2.ac.in/nou23_hs20/preview?user_email=architectspjagtap@gmail.com">https://onlinecourses.swayam2.ac.in/nou23_hs20/preview?user_email=architectspjagtap@gmail.com</a>
<b>Total No of Students Enrolled in I Total No of Students Enrolled in last 05 Years last 05 Years</b>			<b>105</b>	

Last five years (2017 – 2021 ) students Enrolled with **52 NPTEL** Courses & **17 SWAYAM** Courses with a total of **69 Overall** Enrolled.



**Ar.S.P.Jagtap**  
**Dr.A.P.Wategave**  
**Professor**  
 NPTEL SWAYM CO-ORDINATOR

*(Signature)*  
**VC. PRINCIPAL,**  
**APPASAHEB BIRNALE COLLEGE**  
**OF ARCHITECTURE, SANGLI.**

**Principal**  
 Appasahe Birnale College of  
 Architecture, Sangli. 7



# NPTEL SWAYM Architecture Course Syllabus Specimen



## ARCHITECTURAL CONSERVATION AND HISTORIC PRESERVATION

**PROF. SANGHAMITRA BASU**

Department of Architecture & Regional Planning  
IIT Kharagpur

### PRE-REQUISITES : Core

**INTENDED AUDIENCE :** Architect, Urban Planner, Conservation Architect, Urban Designer, Civil Engineer, Archaeologist, Artist, Musicologist, Historian, Tourism Managers, Administrators.

**INDUSTRIES SUPPORT:** Archaeological Survey, State Archaeology Departments, Tourism Departments, Public Works Departments, Development Authorities, Planning Authorities, Municipal Organisations, Local Planning Bodies, Indian National Trust for Art and Cultural Heritage (INTACH) and NGOs.

### COURSE OUTLINE :

This course is designed to address historic preservation and conservation as an approach that establishes a link between past, present and future. Idea is to familiarize the course participants with issues and challenges of heritage areas, about opportunities of heritage structures, sites, precincts and areas, of the need of integrating development with heritage preservation. Evolution of conservation movement, changing concepts and role and policies of various agencies involved in the field of conservation are discussed. Along with definitions and concepts of conservation and heritage, and explanation of various types of heritage, participants are introduced to the international framework of conservation and world heritage scenario.

### ABOUT INSTRUCTOR :

Prof. Sanghamitra Basu, PhD, MA (Conservation Studies, IAAS, York, UK), Post Graduate (Urban Planning, School of Planning and Architecture, New Delhi), B Arch (Hons.), a DANIDA and Charles Wallace Fellow, is currently a Professor in the Department of Architecture & Regional Planning, Indian Institute of Technology (IIT) Kharagpur, India. She has 33 years of experience in teaching at undergraduate and post graduate levels. She has been active in research and consultancy projects in the field of historic preservation and heritage planning, sustainable tourism, heritage management, participatory planning, housing and neighbourhood planning, GIS application and architectural pedagogy.

### COURSE PLAN :

- Week 1:** Course overview and introduction, heritage conservation- need, debate and purpose; understanding heritage and types of heritage resources, values and significance.
- Week 2:** Significance and value assessment, approaches of conservation.
- Week 3:** Divergent approaches and ethics of conservation; history of conservation movement; concept and definitions; international agencies like ICCROM, UNESCO and their role in conservation.
- Week 4:** World Heritage Sites, selection criteria, authenticity and integrity, case studies, endangered sites.
- Week 5:** Causes of decay; listing, documentation and assessment of heritage structures, sites and precincts.
- Week 6:** Investigation, state of preservation and preparing conservation report, case studies; guidelines for maintenance and repair.
- Week 7:** Categories, types and issues of heritage precincts, zones and historic areas; planning for heritage districts, towns and cities; selected case studies.
- Week 8:** Design of new building in historic settings, townscape analysis, visual integration; heritage impact assessment; adaptive reuse of heritage structures; organisational framework and heritage site management, financial incentives and planning tools; role of agencies in safeguarding heritage in India; role of voluntary organisations and community participation; interpretation and presentation of historic sites; heritage tourism; potential and opportunities of heritage conservation.



**VC. PRINCIPAL,**  
**APPASAHEB BIRNALE COLLEGE**  
**OF ARCHITECTURE, SANGLI.**



# NPTEL SWAYM Architecture Course Syllabus Specimen



## SUSTAINABLE ARCHITECTURE

**PROF. AVLOKITA AGRAWAL**  
Department of Architecture and Planning  
IIT Roorkee

**PRE-REQUISITES :** Climatology, Building materials

**INTENDED AUDIENCE :** Architecture and Planning

**INDUSTRIES APPLICABLE TO :** IGBC, GRIHA, BEE, BIS, Green Building Consultants, Practicing Architecture Firms

### **COURSE OUTLINE :**

The pace at which resource consumption is increasing in every field, it has become imperative to consider sustainability in all aspects. Buildings are a major consumer of resources through their life time. This has been realized by the nations world over and hence stricter norms and laws for construction are being laid. Buildings are supposed to be more and more efficient and optimal in consuming resources. Such buildings are called sustainable buildings and all buildings will be required to be sustainable. Hence this course becomes important in understanding-

1. The basic parameters of sustainable buildings.
2. Design, Practices and technology which would lead to creation of such buildings.
3. Science behind performance of efficient buildings.

### **ABOUT INSTRUCTOR :**

I Am Dr. Avlokita Agrawal. I earned Bachelor of Architecture degree from IIT Roorkee in 2003 and PhD from IIT Roorkee in 2010. Right from college, the subject which most interested me were climatology and passive designing which were taught to us by one of the most accomplished teachers of those times, Dr. M R Sharma and Dr. I C Sharma, both from CBRI. After B Arch, I pursued PhD where I studied Impact of Vaastushastra on thermal comfort in traditional Havelis of Rajasthan. While pursuing PhD and post completion of PhD, I worked for companies like Asahi India Glass (where I headed their Green Design Division) and Honeywell international (where I worked in Corporate Affairs division with a focus on building energy efficiency vertical). In corporate jobs, I was mainly working toward various aspects of building energy efficiency. After joining back academics, I have mainly taught subjects like Sustainable Built Environment. I also manage the IGBC student chapter at IIT Roorkee.

### **COURSE PLAN :**

**Week 1:** Fundamentals of sustainability, definitions, historical development of the concept of sustainability and sustainable development, Sustainable architecture as a subset of sustainable development.

**Week 2:** Impacts of built environment on natural environment, Sustainable Development, Agenda 21, UN Goals,

**Week 3:** Characteristics of sustainable architecture, fundamentals of passive designing and climatology, thermal comfort, visual comfort, acoustic comfort

**Week 4:** Sustainable buildings, parameters of sustainable buildings, Green buildings, indicators of green buildings, Terminologies related to sustainable buildings- carbon footprint, life cycle analysis,

**Week 5:** Site development- site selection, UHI, Public Transport, vegetation, development footprint, storm water runoff, SRI

**Week 6:** Water – estimating the use, reductions in consumption, recycling, reuse, landscape requirement, strategies and technology for water conservation

**Week 7:** IEQ- day lighting, views, CFC free, ventilation, comfort, VOC free,

**Week 8:** Materials and Resources- segregation, recycling, reduction in waste, reuse of materials and building, renewability

**Week 9:** Energy- energy efficiency, energy conservation, ECBC, renewable energy, M&V

**Week 10:** Codes and compliances – ECBC, NBC, other rating systems prevalent in india

**Week 11:** Vernacular architecture and sustainability, culture and sustainability,

**Week 12:** Software use for Energy compliance- Design Builder, Climate Consultant etc



**VC. PRINCIPAL,**  
**APPASAHEB BIRNALE COLLEGE**  
**OF ARCHITECTURE, SANGLI.**

## Appasaheb Birnale College of Architecture , Sangli

1.2.1 Number of Add on /Certificate/Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. where the students of the institution have benefitted during the last five years)

YEAR 2023 ( Jan – April )						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Engineering & Architectural Graphics Part II Isometric & Axonometric drawings	Noc-23 –ar 06	2023	01	03 Months	02	02
Engineering & Architectural Graphics Part I Orthographic Projection	Noc-23 –ar 05	2023	01	03 Months	02	02
Strategies for Sustainable Design	Noc-23 –ce 01	2023	01	03 Months	03	03
Introduction to History of Architecture in India	Noc-23 –ar 02	2023	01	03 Months	01	01
Structure , Form and Architecture : The Synergy	Noc-23 –ar 01	2023	01	03 Months	02	01
User Interface Design	Noc-23 –ar 03	2023	01	03 Months	02	02
Total Quality Management	Noc-23 –ar 06	2023	01	03 Months	02	00
Health Research Fundamentals	Noc-23 –ahs25	2023	01	03 Months	01	01
					15	12

YEAR 2022 ( Jan – April 2022 )						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Strategies of Sustainable design	Noc-22 –de 06	2022	01	03 Months	07	02
Research Methodology	Noc-22 –de 08	2022	01	03 Months	01	01
Advance Computer Architecture	Noc-22 –cs 10	2022	01	03 Months	01	01
Medical Biomaterials	Noc-22 –bt 15	2022	01	03 Months	01	01
Medicinal Chemistry	Noc-22 cy 24	2022	01	03 Months	01	01
User Interface Design	Noc-22 ar 02	2022	01	03 Months	01	01
Entrepreneurship Essentials	Noc-22 ge 03	2022	01	03 Months	01	01
Basic Course in Ornithology	Noc-22 ge 10	2022	01	03 Months	01	01
Disaster Recovery & Build Back Better	Noc-22 ar 05	2022	01	03 Months	01	01
Structure , Form & Architecture: The Synergy	Noc-22 ar 01	2022	01	03 Months	01	00
					16	10



  
**VC. PRINCIPAL,** 10  
**APPASAHEB BIRNALE COLLEGE**  
**OF ARCHITECTURE, SANGLI.**



ESTD. 1993

SHRI. VASANTRAO BANDUJI PATIL TRUST'S

## APPASAHEB BIRNALE COLLEGE OF ARCHITECTURE, SANGLI.

(Approved By A.I.C.T.E., C.O.A. New Delhi, Affiliated to Shivaji University, Kolhapur.)

South Shivaji Nagar, Sangli-Miraj Road, Sangli - 416 416. Ph. (0233) 2320294 / 2322336.

\* E-mail : mh24sangli@gmail.com \* web : abcasangli.org

Ref. No. *ABCA/2021-2022/*

Date : *22/12/2021*

This is to notice that all the B-Arch & M-Arch Studnets are informed that from 01/01/2022 NPTEL & SWAYM Cources will be beginning. All the students are requested to enrolled the cources through college Local Chapter ( LC ) and take benefit of all the Architectural cources.



*[Signature]*  
VC. PRINCIPAL,  
APPASAHEB BIRNALE COLLEGE  
OF ARCHITECTURE, SANGLI.

*[Signature]*  
*22/12/2021*

*[Signature]*  
*22/12/21*





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Ref. No. *ABCA/2020-2021*)

Date : *21/12/2020*

This is to notice that all the B-Arch & M-Arch Studnets are informed that from 01/01/2021 NPTEL & SWAYM Cources will be beginning. All the students are requested to enrolled the cources through college Local Chapter ( LC ) and take benefit of all the Architectural cources.



*Srinatya*  
VC. PRINCIPAL,  
APPASAHEB BIRNALE COLLEGE  
OF ARCHITECTURE, SANGLI.

*21/12/2020*  
*21/12/2020*  
*Srinatya*  
*21/12/20*

YEAR 2022 ( July –December 2022)						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Architectural Conservation & Historic Preservation	Noc-22 –ar 08	2022	01	03 Months	02	00
Urban Governance & Development Management ( UGDM)	Noc-22 –de 08	2022	01	03 Months	01	00
Sustainable Architecture	Noc-22 –ar 12	2022	01	03 Months	01	00
Principles & Application of Building Science	Noc-22 –bt 15	2022	01	03 Months	04	02
Introduction to Urban Planning	Noc-22 cy 24	2022	01	03 Months	01	01
Project Management	Noc-22 ar 02	2022	01	03 Months	01	01
Role of Craft and technology in Interior-Architecture	Noc-22 ar 09	2022	01	03 Months	01	01
Modern Indian Architecture	Noc-22 ar 13	2022	01	03 Months	02	01
International; Studies in Vernacular Architecture	Noc-22 ar 17	2022	01	03 Months	01	01
	Noc-22 ar 01	2022	01	03 Months	01	00
					15	07

YEAR 2021 ( Jan –April 2021 )						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Sustainable Architecture	Ns_Noc-21 –ar 03	2021	01	03 Months	04	04
Architectural Conservation & Historic Preservation	Ns_Noc-21 –ace 05	2021	01	03 Months	01	01
					05	05



*Appasaheb Birnale*  
**V.C. PRINCIPAL,**  
**APPASAHEB BIRNALE COLLEGE 13**  
**OF ARCHITECTURE, SANGLI.**





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\* E-mail : mh24sangli@gmail.com \* web : abcasangli.org

Ref. No. ABCA/2019-2020)

Date:-20/12/2019

This is to notice that all the B-Arch & M-Arch Studnets are informed that from 01/01/2020 NPTEL & SWAYM Courses will be beginning. All the students are requested to enrolled the courses through college Local Chapter ( LC ) and take benefit of all the Architectural courses.



*Appatigane*  
VC. PRINCIPAL,  
APPASAHEB BIRNALE COLLEGE  
OF ARCHITECTURE, SANGLI.

*Shubh*  
20/12/2019  
Final year  
*Tammy Kyun*  
20.12.19

YEAR 2021 ( July –December 2021 )						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Cultural Responsive Built Environments	Noc-21 –ar 07	2021	01	03 Months	04	04
Wild life Ecology	Noc-21 –bt 48	2021	01	03 Months	01	01
Remote Sensing and GIS	Noc-21 –ce 61	2021	01	03 Months	01	01
Ecology & Environment	Noc-21 –ge 16	2021	01	03 Months	01	01
Contemporary Architecture & Design	Noc-21 –ar 08	2021	01	03 Months	04	02
Principles & Application of Building Science	Noc-21 –ar 15	2021	01	03 Months	02	02
Architectural Acoustics	Noc-21 –ar 06	2021	01	03 Months	03	02
Building Materials & Composites	Noc-21 –ar 11	2021	01	03 Months	01	01
Urban Utilities Planning : Water Supply Sanitation and Drainage science.	Noc-21 –ar 13	2021	01	03 Months	02	00
Housing Policy & Planning	Noc-21 –ar 13	2021	01	03 Months	01	00
Contemporary Architecture & Design	Noc-21 –ar 08	2021	01	03 Months	01	01
Analytical Chemistry	Noc-21 –cy 28	2021	01	03 Months	02	01
Experimental Biotechnology	Noc-21 –bt 36	2021	01	03 Months	01	01
					23	17

YEAR 2020 ( Jan –April 2020 )						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Sustainable Architecture	Noc-20 –ar 01	2020	01	03 Months	02	01
Qualitative Research Methods and Research Writing	Noc-20 –ge 01	2020	01	03 Months	01	01
Introduction to Research writing	Noc-20 –ge 04	2020	01	03 Months	01	00
Introduction to Geographic Information System.	Noc-20 –ce 20	2020	01	03 Months	01	01
Landscape Architecture and Planning –Basic Fundamentals.	Noc-20 –ce 11	2020	01	03 Months	01	01
					06	04



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(Approved By A.I.C.T.E., C.O.A. New Delhi, Affiliated to Shivaji University, Kolhapur.)

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\* E-mail : mh24sangli@gmail.com \* web : abcasangli.org

Ref. No. ABCA / 2018-2019

Date : 22/12/2018

This is to notice that all the B-Arch & M-Arch Studnets are informed that from 01/01/2019 NPTEL & SWAYM Cources will be beginning. All the students are requested to enrolled the cources through college Local Chapter ( LC ) and take benefit of all the Architectural cources.



*Spratejve*  
VC. PRINCIPAL,  
APPASAHEB BIRNALE COLLEGE  
OF ARCHITECTURE, SANGLI.

*22/12/2018*  
*22/12/2018*

*Tammy*  
22.7.18

YEAR 2020 ( July –December 2020 )						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Contemporary Architecture & Design	Noc-20 –ar 08	2020	01	03 Months	04	04
Role of Craft & Technology in Interior- Architecture	Noc-20 –ar 09	2020	01	03 Months	02	01
Urban Landscape & Transportation Planning	Noc-20 –ar 13	2020	01	03 Months	02	00
Visual Communication Design for Digital Media	Noc-20 –ar 15	2020	01	03 Months	01	01
Wildlife Ecology	Noc-20 –bt 38	2020	01	03 Months	01	01
Wildlife Conservation	Noc-20 –bt 39	2020	01	03 Months	01	01
Remote Sensing & GIS	Noc-20 –ce 58	2020	01	03 Months	01	01
Ecology & Environment	Noc-20 –ge 16	2020	01	03 Months	01	01
Big data Computing	Noc-20 –cs 92	2020	01	03 Months	01	00
Urban Governance & Development Management ( UGDM)	Noc-20 –ar 12	2020	01	03 Months	01	00
Building Materials & Composites	Noc-20 –ar 04	2020	01	03 Months	01	01
Disaster Recovery & Build Back Better	Noc-20 –ar 13	2020	01	03 Months	01	01
Technologies for Clean and Renewable Energy Production	Noc-20 –ch 37	2020	01	03 Months	01	01
Analytical Chemistry	Noc-20 –cy 18	2020	01	03 Months	01	01
Introduction to Polymer Science	Noc-20 –cy 18	2020	01	03 Months	01	01
Architectural Acoustics	Noc-20 –ar 07	2020	01	03 Months	01	01
					<b>21</b>	<b>16</b>

YEAR 2019 ( Jan –April 2019 )						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Architectural Conservation And Historic Preservation	Noc-19 –ar 08	2020	01	03 Months	01	00
Introduction to Internet of Things	Noc-19 –cs 31	2020	01	03 Months	01	00
					<b>02</b>	<b>00</b>

YEAR 2019 ( June –Sept 2019 )						
Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Course Code (if any)	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Contemporary Architecture & Design	Noc-19 –ar 14	2020	01	03 Months	01	00
					<b>02</b>	<b>00</b>



  
**VC. PRINCIPAL,**  
**APPASAHEB BIRNALE COLLEGE**  
**OF ARCHITECTURE, SANGLI.**



# NPTEL SWAYM Architecture Course Syllabus

## Students Certification ( B-Arch )

This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22DE06S44160270

To  
VAISHNAVI BHASKAR PATIL  
SWPNASHILP APP. FLAT NO.7  
GULMOHOR COLONY, SANGLI  
SANGLI  
MAHARASHTRA - 416416  
PH. NO :919561561363



No. of credits recommended by NPTEL:3

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate



## NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

**VAISHNAVI BHASKAR PATIL**

for successfully completing the course

### Strategies for Sustainable Design

with a consolidated score of **58** %

Online Assignments	21.56/25	Proctored Exam	36/75
--------------------	----------	----------------	-------

Total number of candidates certified in this course: **176**

Prof. B Umashankar  
Chairperson, Centre for Continued Education (CCE)  
IIT Hyderabad

Jan-Apr 2022  
(12 week course)

Prof. Andrew Thangaraj  
NPTEL, Coordinator  
IIT Madras



Indian Institute of Technology Hyderabad



Roll No: NPTEL22DE06S44160270

To validate and check scores: <https://npTEL.ac.in/noc>





This certificate is computer generated and can be verified by scanning the QR code given below.

Roll No: NPTEL22DE06S34160037

To  
DIGVIJAY SHRIKANT DESHMUKH  
NEAR SAMARTH MANGAL KARYALAY  
VASUD ROAD  
SANGOLA  
MAHARASHTRA - 413307  
PH. NO :7350896087



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



## NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

**DIGVIJAY SHRIKANT DESHMUKH**

for successfully completing the course

### Strategies for Sustainable Design

with a consolidated score of **48** %

Online Assignments	16.81/25	Proctored Exam	31.5/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: **176**

*B. Umashankar*

**Prof. B Umashankar**  
Chairperson, Centre for Continued Education (CCE)  
IIT Hyderabad

**Jan-Apr 2022**  
(12 week course)

*Prof. Andrew Thangaraj*

**Prof. Andrew Thangaraj**  
NPTEL, Coordinator  
IIT Madras



Indian Institute of Technology Hyderabad



Roll No:NPTEL22DE06S34160037

To validate and check scores: <https://npTEL.ac.in/noc>



# NPTEL SWAYM Architecture

## Course Syllabus Students Certification ( M-Arch )

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, <https://nptel.ac.in/noc/>

Roll No: NPTEL21AR03S14290119  
To  
ASHWINI AMIT PATIL  
8,PITRUCHAYA AP, JAIHIND CLNY,VISHRAMBAG  
MAHARASHTRA - 416415  
PH. NO :9422604316



Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate

No. of credits recommended by NPTEL:3

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



### Elite

## NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to  
**ASHWINI AMIT PATIL**  
for successfully completing the course



**Sustainable Architecture**


with a consolidated score of **75** %

Online Assignments	24.38/25	Proctored Exam	50.5/75
--------------------	----------	----------------	---------

Total number of candidates certified in this course: **111**

  
**Prof. V. C. Srivastava**  
Coordinator, Continuing Education Centre  
IIT Roorkee

Jan-Apr 2021  
(12 week course)

  
**Prof. Inderdeep Singh**  
NPTEL Coordinator  
IIT Roorkee

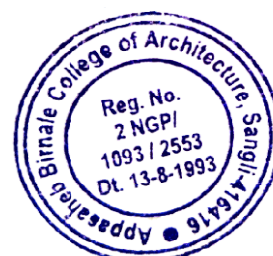


Indian Institute of Technology Roorkee



Roll No:NPTEL21AR03S14290119

To validate and check scores: <https://nptel.ac.in/noc>



# NPTEL SWAYM Architecture Course Syllabus

## Faculty Certification ( B-Arch )

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, <https://nptel.ac.in/noc/>

Roll No: NPTEL21AR03S14290122

To  
SUNIL NITWE  
SHRI CONSULTANTS, KALASHREE ARCADE  
FLAT NO 1, NEAR RAM MANDIR  
SANGLI  
MAHARASHTRA - 416416  
PH. NO : 9823132325



No. of credits recommended by NPTEL: 3

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully Completed
<40	No Certificate



## NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

**SUNIL NITWE**

for successfully completing the course

**Sustainable Architecture**

with a consolidated score of **53** %

Online Assignments	22.5/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **111**

Prof. V. C. Srivastava  
Coordinator, Continuing Education Centre  
IIT Roorkee

Jan-Apr 2021  
(12 week course)

Prof. Inderdeep Singh  
NPTEL Coordinator  
IIT Roorkee



Indian Institute of Technology Roorkee



Roll No: NPTEL21AR03S14290122

To validate and check scores: <https://nptel.ac.in/noc/>



# NPTEL SWAYM Architecture Course Syllabus Faculty Certification ( M-Arch )



Roll No: NPTEL19AR08S51620031

TO SHANTANU PRAKASH JAGTAP  
APPASAHEB BIRNALE COLLEGE OF  
ARCHITECTURE, SOUTH SHIVAJI NAGAR,  
SANGLI  
MAHARASHTRA  
416416  
PH. NO :9921069990



Duration of NPTEL course: 8 Weeks

No. of weeks of NPTEL Courses	Equivalence of NPTEL course with regular FDP
4	$\frac{1}{2}$ FDP of one week
8	Full FDP of one week
12	$1\frac{1}{2}$ FDP



## NPTEL-AICTE Faculty Development Programme

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

**SHANTANU PRAKASH JAGTAP**

for successfully completing the course


**Architectural Conservation And  
Historic Preservation**

with a consolidated score of **47 %**



  
Prof. Andrew Thangaraj  
NPTEL Coordinator  
IIT Madras

(Feb-Apr 2019)

  
Prof. Dileep N. Malkhede  
Advisor-I (Research, Institute & Faculty Development)  
All India Council for Technical Education

Roll No: NPTEL19AR08S51620031

To validate and check scores: <http://npTEL.ac.in/noc>

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.  
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24<sup>th</sup> July 2018, similar to other refresher / orientation courses.  
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18

