



**KARNATAK LAW SOCIETY'S  
GOGTE INSTITUTE OF TECHNOLOGY  
"JNANA GANGA" UDYAMBAG, BELAGAVI-590008,  
KARNATAKA, INDIA.**

**Approved by AICTE & UGC  
Permanently Affiliated and Autonomous Institution Under  
Visvesvaraya Technological University, Belagavi  
[www.git.edu](http://www.git.edu)**



## **5<sup>th</sup> Year 2018 N Scheme**

**Academic year 2021- 2022 onwards**

**Department: Architecture**

**Programme: B.Arch**

**1<sup>st</sup> to 10<sup>th</sup> Semester Scheme of Teaching and Examination**

**9<sup>th</sup> to 10<sup>th</sup> Semester Syllabus**

## **INSTITUTION VISION**

Gogte Institute of Technology shall stand out as an institution of excellence in technical education and in training individuals for outstanding caliber, character coupled with creativity and entrepreneurial skills.

## **MISSION**

To train the students to become Quality Engineers with High Standards of Professionalism and Ethics who have Positive Attitude, a Perfect blend of Techno-Managerial Skills and Problem solving ability with an analytical and innovative mindset.

## **QUALITY POLICY**

- Imparting value added technical education with state-of-the-art technology in a congenial, disciplined and a research oriented environment.
- Fostering cultural, ethical, moral and social values in the human resources of the institution.
- Reinforcing our bonds with the Parents, Industry, Alumni, and to seek their suggestions for innovating and excelling in every sphere of quality education.

## **DEPARTMENT VISION**

The Department of Architecture shall stand out as the Department of excellence in architectural education and space making, in training individuals for outstanding calibre, character and holistic development.

## **MISSION**

To train the students to grapple with complex issues that are emerging in today's society and encourage them to be designers who will find architectural solutions that respond appropriately to culture, climate and context

## **COURSES, PERIODS OF STUDY AND SUBJECTS OF EXAMINATION UNDER CHOICE BASED CREDIT SYSTEM FOR THE ARCHITECTURE DEGREE PROGRAM**

**1.0** Under the Choice based credit system, which is a student/ learner centric system, the courses of study in the Architecture Degree program shall be as under:

**1.1 Professional Core (PC) Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.

**1.2 Basic Sciences and Applied Engineering (BS & AE) Course:** A course which informs the Professional core and should compulsorily be studied.

**1.3 Elective Course:** Generally a course which can be chosen from a pool of courses and are of two types:

**(i) Professional Elective (PE)** which may be very specific or specialized or advanced or supportive to the discipline/ subject of study or which provides an extended scope

**(ii) Open Elective (OE)** which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill

**1.4 Employability Enhancement Courses (EEC)** which may be of two kinds: Employability Enhancement Compulsory Courses (EECC) and Skill Enhancement Courses (SEC)

**2.0** The Weightage in terms of Credits for each of the above in the prescribed curriculum of the institution shall be as follows:

1. Professional Core Courses (PC) : 45%

2. Building Science and Applied Engineering (BS& AE) : 20 %

3. Elective Courses

(i) Professional Electives (PE) : 10%

(ii) Open Electives (OE) : 5%

4. Professional Ability Enhancement Courses (PAEC)

(i) Professional Ability Enhancement Compulsory Courses (PAECC) : 15%

(ii) Skill Enhancement Courses (SEC) : 5%

Note: Where it is not possible to offer Open Electives, Professional Electives may have a weightage 15% of the total credits.

### **Semester wise distribution of credits for B.Arch. program**

**Total credits for B.Arch. Program: 260 credits**

	<b>Semester</b>	<b>Credits per Sem</b>	<b>Total credits</b>
1 <sup>st</sup> year	1	25	54
	2	29	
2 <sup>nd</sup> year	3	29	57
	4	28	
3 <sup>rd</sup> year	5	31	63
	6	32	
4 <sup>th</sup> year	7	31	47
	8	16	
5 <sup>th</sup> year	9	20	39
	10	19	
	<b>Total</b>	<b>260</b>	<b>260</b>



**Karnatak Law Society's  
GOGTE INSTITUTE OF TECHNOLOGY, BELAGAVI-08  
Bachelor of Architecture  
SCHEME OF TEACHING AND EXAMINATION**



**Department :Architecture**

**Semester: I**

Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks					Duration of Exam
					L	S	P/SE	Total		CIE		SEE		Total	
										CP	PA	VIV	EXAM		
DESIGN	18DES1.1N	PC	Basic Design and Visual Arts	Architecture	1	6	0	7	10	10	40	50	-	100	
	18DES1.2N	PC	Model Making	Architecture	0	0	3	3	CA	20	80	-	-	100	-
TECHNOLOGY	18TEC1.1N	BS&AE	Building Construction and Materials-I	Architecture	1	2	2	5	5	10	40	50	-	100	-
	18TEC1.2N	PC	Architectural Graphics-I	Architecture	0	1	3	4	3	10	40	50	-	100	-
	18TEC1.3N	BS&AE	Structures-I	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
HUMANITIES	18HUM1.1N	PC	History of Architecture- I	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18HUM1.2N	SEC	Communication Skills	Architecture	1	0	0	1	1	20	80	-	-	100	-
<b>Total</b>					<b>9</b>	<b>9</b>	<b>8</b>	<b>26</b>	<b>25</b>	<b>90</b>	<b>360</b>	<b>150</b>	<b>100</b>	<b>700</b>	

**L-Lecture**

**S-Studio**

**P-Practical**

**SE - Studio Exercise**

**Minimum Marks for passing:**

**CIE - Continuous Internal Evaluation**

**SEE - Semester End Examination**

PC - Professional Core; BS&AE- Building Science and Applied Engineering; PE- Professional Elective; OE- Open Elective

PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.

Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,

For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together.

**Class Participation**

**PA-Progressive Assessment**

**CA-Compulsory Audit**



**Kamatak Law Society's  
GOTIE INSTITUTE OF TECHNOLOGY, BELAGAVI-08  
Bachelor of Architecture**



**SCHEME OF TEACHING AND EXAMINATION**

**Department :Architecture**

**Semester: II**

Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks					Duration of Exam
					L	S	P/SE	Total		CIE		SEE		Total	
										CP	PA	VIVA/TVEXAM			
<b>DESIGN</b>	18DES2.1N	PC	Architectural Design -I	Architecture	1	6	0	7	9	10	40	50	-	100	-
<b>TECHNOLOGY</b>	18TEC 2.1N	BS&AE	Building Construction and Materials-II	Architecture	1	2	2	5	5	10	40	50	-	100	-
	18TEC 2.2N	PC	Architectural Graphics-II	Architecture	0	1	3	4	3	10	40	50	-	100	-
	18TEC 2.3N	BS&AE	Structures-II	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18TEC2.4N	BS&AE	Surveying and Levelling	Architecture	2	0	2	4	3	10	40	-	50	100	3 hrs
<b>HUMANITIES</b>	18HUM2.1N	PC	History of Architecture-II	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18HUM 2.2N	PC	Art Appreciation	Architecture	2	0	0	2	2	20	80	-	-	100	-
	18HUMB2.3N	SEC	Kannada	Architecture	2	0	0	2	1	5	20	-	25	50	2 hrs
	18HUMS2.3N														
<b>Total</b>					<b>14</b>	<b>9</b>	<b>7</b>	<b>30</b>	<b>29</b>	<b>85</b>	<b>340</b>	<b>150</b>	<b>175</b>	<b>750</b>	

**L-Lecture**

**S-Studio**

**P-Practical**

**SE - Studio Exercise**

**Minimum Marks for passing:**

**CIE - Continuous Internal Evaluation**

**SEE - Semester End Examination**

PC - Professional Core; BS&AE- Building Science and Applied Engineering; PE- Professional Elective; OE- Open Elective

PAECC - Professional Ability Enhancement Compulsory Courses, SEC - Skill Enhancement Courses.

**Theory, Studio and Lab Marks (CIE) : 50%, Term Work/Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,**

For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together

**CP-Class Participation**

**PA-Progressive Assessment**

**CA-Compulsory Audit**



**Karnatak Law Society's**  
**GOGTE INSTITUTE OF TECHNOLOGY, BELAGAVI-08**  
**Bachelor of Architecture**  
**SCHEME OF TEACHING AND EXAMINATION**



Department :Architecture

Semester: III

Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks				Duration of Exam	
					L	S	P/SE	Total		CIE		SEE			Total
										CP	PA	VIVA/TW	ELSM		
DESIGN	18DES 3.1N	PC	Architectural Design -II	Architecture	1	6	0	7	10	10	40	50	-	100	-
	18DES 3.2N	BS&AE	Climatology	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
TECHNOLOGY	18TEC 3.1N	BS&AE	Building Construction and Materials-III	Architecture	1	2	2	5	5	10	40	50	-	100	-
	18TEC 3.2N	BS&AE	Building Services-I (WATER SUPPLY AND SANITATION)	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18TEC 3.3N	BS&AE	Structures-III	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18TEC 3.4N	SEC	Computer Application-I	Architecture	1	0	2	3	2	10	40	50	-	100	-
HUMANITIES	18HUM 3.1N	PC	History of Architecture-III	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18HUM 3.2N	PC	Vacation Assignment-I	Architecture	0	0	0	0	CA	20	80	-	-	100	-
<b>Total</b>					<b>15</b>	<b>8</b>	<b>4</b>	<b>27</b>	<b>29</b>	<b>90</b>	<b>360</b>	<b>150</b>	<b>200</b>	<b>800</b>	

**L-Lecture**

**CIE- Continuous Internal Evaluation**

**CP-Class Participation**

**S-Studio**

**SEE- Semester End Examination**

**PA-Progressive Assessment**

**CA-Compulsory Audit**

**P-Practical**

PC - Professional Core; BS&AE- Building Science and Applied Engineering; PE- Professional Elective; OE- Open Elective

**SE - Studio Exercise**

PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.

**Minimum Marks for passing**

**Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,**

**For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together**

**Note: Students are to be taken on study tour or given vacation assignment after II semester examinations, before the starting of III semester**



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**SCHEME OF TEACHING AND EXAMINATION**



Department :Architecture

Semester: IV

Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks				Duration of Exam	
					L	S	P/SE	Total		CIE		SEE			Total
										CP	PA	VIVA/TW	ELAM		
DESIGN	18DES 4.IN	PC	Architectural Design -III	Architecture	1	6	0	7	10	10	40	50	-	100	-
TECHNOLOGY	18TEC 4.IN	BS&AE	Building Construction and Materials-IV	Architecture	1	2	2	5	5	10	40	50	-	100	-
	18TEC 4.2N	BS&AE	Building Services-II	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18TEC 4.3N	BS&AE	Structures-IV	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18TEC 4.4N	SEC	Computer Application-II	Architecture	1	0	2	3	2	10	40	50	-	100	-
HUMANITIES	18HUM 4.1N	PC	History of Architecture-IV	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18HUM 4.2N	PC	Humanities	Architecture	1	0	2	3	2	20	80	-	-	100	-
<b>Total</b>					<b>13</b>	<b>8</b>	<b>6</b>	<b>27</b>	<b>28</b>	<b>80</b>	<b>320</b>	<b>150</b>	<b>150</b>	<b>700</b>	

L-Lecture

S-Studio

P-Practical

SE - Studio Exercise

Minimum Marks for passing:

CIE - Continuous Internal Evaluation

SEE- Semester End Examination

PC - Professional Core; BS&AE- Building Science and Applied Engineering; PE- Professional Elective; OE- Open Elective

PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.

Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,

For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together.

CP-Class Participation

PA-Progressive Assessment

CA-Compulsory Audit



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Bachelor of Architecture  
SCHEME OF TEACHING AND EXAMINATION**



Department : Architecture

Semester: V

Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks				Duration of Exam	
					L	S	P/SE	Total		CIE		SEE			Total
										CP	PA	THE/TW	HM/AM		
DESIGN	18DES 5.1N	PC	Architectural Design -IV	Architecture	0	8	0	8	12	10	40	50	-	100	-
	18DES 5.2N	PC	Theory of Architecture-I	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18DES 5.3N	SEC	Working Drawing	Architecture	1	0	2	3	2	10	40	50	-	100	-
TECHNOLOGY	18TEC 5.1N	BS&AE	Building Construction and Materials-V	Architecture	1	2	2	5	5	10	40	50	-	100	-
	18TEC 5.2N	BS&AE	Building Services-III	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18TEC 5.3N	BS&AE	Structures-V	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
HUMANITIES	18HUM 5.1N	PC	History of Architecture-V	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18HUM 5.2N	PC	Vacation Assignment-II	Architecture	0	0	0	0	CA	20	80	-	-	100	-
<b>Total</b>					14	10	4	28	31	90	360	150	200	800	

L-Lecture

CIE- Continuous Internal Evaluation

CP-Class Participation

S-Studio

SEE- Semester End Examination

PA-Progressive Assessment

CA-Compulsory Audit

P-Practical

PC - Professional Core; BS&AE- Building Science and Applied Engineering; PE- Professional Elective; OE- Open Elective

SE - Studio Exercise

PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.

Minimum Marks for passing

Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%

For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together.

Note: Students are to be taken on study tour or given vacation assignment after IV semester examinations, before the starting of V semester





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Bachelor of Architecture  
SCHEME OF TEACHING AND EXAMINATION**



Department : Architecture

Semester: VI

Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks				Duration of Exam	
					L	S	P/SE	Total		CIE		SEE			Total
										CP	PA	VIVA	ELSM		
DESIGN	18DES 6.IN	PC	Architectural Design-V	Architecture	0	8	0	8	12	10	40	50	-	100	-
	18DES 6.2N	PC	Theory of Architecture II	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18DES 6.3N	PC	Landscape Architecture	Architecture	2	0	2	4	3	10	40	-	50	100	3 hrs
TECHNOLOGY	18TEC 6.IN	BS&AE	Building Construction and Materials-VI	Architecture	1	2	2	5	5	10	40	50	-	100	-
	18TEC 6.2N	BS&AE	Structures-VI	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
HUMANITIES	18HUM 6.IN	PC	Physical Planning	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
	18HUM 6.2N	PC	Contemporary Architecture	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
<b>Total</b>					<b>15</b>	<b>10</b>	<b>4</b>	<b>29</b>	<b>32</b>	<b>70</b>	<b>280</b>	<b>100</b>	<b>250</b>	<b>700</b>	

**L-Lecture**

**CIE- Continuous Internal Evaluation**

**CP-Class Participation**

**S-Studio**

**SEE- Semester End Examination**

**PA-Progressive Assessment**

**CA-Compulsory Audit**

**P-Practical**

**PC - Professional Core; BS&AE- Building Science and Applied Engineering; PE- Professional Elective; OE- Open Elective**

**SE - Studio Exercise**

**PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.**

**Minimum Marks for passing:**

**Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,**

**For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together.**



**Karnatak Law Society's**  
**COGIT INSTITUTE OF TECHNOLOGY, BELAGAVI-08**  
**Bachelor of Architecture**  
**SCHEME OF TEACHING AND EXAMINATION**



Department :Architecture											Semester: VII				
Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks				Duration of Exam	
					L	S	P/SE	Total		CIE		SEE			Total
										CP	PA	VIVA	ELSM		
DESIGN	18DES 7.1N	PC	Architectural Design -VI	Architecture	2	8	-	10	14	10	40	50	-	100	-
	18DES 7.2N	PC	Specification, Estimation and	Architecture	3	0	-	3	3	10	40	-	50	100	3 hrs
TECHNOLOGY	18TEC 7.1N	BS&AE	Alternate Building Techniques	Architecture	0	0	4	4	2	10	40	50	-	100	-
	18TEC 7.2N	BS&AE	Building Services -IV	Architecture	3	0	-	3	3	10	40	-	50	100	3 hrs
	18TEC 7.3N	PC	Earthquake Resistant	Architecture	2	0	-	2	2	20	80	-	-	100	-
HUMANITIES	18HUM 7.1N	PE	Elective -I	Architecture	2	0	2	4	3	20	80	-	-	100	-
	18HUM 7.2N	PAECC	Professional Practice-I	Architecture	3	0	-	3	3	10	40	-	50	100	3 hrs
	18CRT7.1N	SEC	Certification Course	Architecture	0	0	-	0	1	-	50	-	-	50	-
<b>Total</b>					<b>15</b>	<b>8</b>	<b>6</b>	<b>29</b>	<b>31</b>	<b>90</b>	<b>410</b>	<b>100</b>	<b>150</b>	<b>750</b>	
<b>L-Lecture</b>		<b>CIE- Continuous Internal Evaluation</b>			<b>CP-Class Participation</b>										
<b>S-Studio</b>		<b>SEE- Semester End Examination</b>			<b>PA-Progressive Assessment</b>			<b>CA-Compulsory Audit</b>							
<b>P-Practical</b>		<b>PC - Professional Core; BS&amp;AE - Building Science and Applied Engineering; PE - Professional Elective; OE - Open Elective</b>													
<b>SE - Studio Exercise</b>		<b>PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.</b>													
<b>Minimum Marks for passing:</b>		<b>Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,</b>													
		<b>For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together.</b>													



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**Bachelor of Architecture**  
**SCHEME OF TEACHING AND EXAMINATION**



Department : Architecture										Semester: VIII				
Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks			Duration of Exam	
					L	S	P/SE	Total		CIE	SEE			Total
											PA	VVA		
DESIGN	18DES 8. IN	PAECC	Professional Training	Architecture	16 weeks				16	50	50	-	100	-
<b>Total</b>									<b>16</b>	<b>50</b>	<b>50</b>		<b>100</b>	
<b>L-Lecture</b>		<b>CIE- Continuous Internal Evaluation</b>		<b>CP-Class Participation</b>										
<b>S-Studio</b>		<b>SEE- Semester End Examination</b>		<b>PA-Progressive Assessment</b>										<b>CA-Compulsory Audit</b>
<b>P-Practical</b>		PC - Professional Core; BS- Building Science and Applied Engineering; PE- Professional Elective; OE- Open Elective												
<b>SE - Studio Exercise</b>		PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.												
<b>Minimum Marks for passing:</b>		Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,												
		For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together												



**Karnatak Law Society's**  
**GOGTE INSTITUTE OF TECHNOLOGY, BELAGAVI-08**  
**Bachelor of Architecture**  
**SCHEME OF TEACHING AND EXAMINATION**



**Department :Architecture**

**Semester: IX**

Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks				Duration of Exam	
					L	S	P/SE	Total		CIE		SEE			Total
										CP	PA	VVA/TW	EXAM		
DESIGN	18DES 9.1N	PAECC	Dissertation (Thesis Part- I)	Architecture	2	4	0	6	8	10	40	50	-	100	-
	18DES 9.2N	BS&AE	Energy Efficient Architecture	Architecture	1	0	4	5	3	10	40	50	-	100	-
	18DES 9.3N	PE	Elective-II	Architecture	2	0	2	4	3	20	80	-	-	100	-
TECHNOLOGY	18TEC 9.1N	PE	Elective-III	Architecture	2	0	2	4	3	20	80	-	-	100	-
HUMANITIES	18HUM.9.1N	PAECC	Professional Practice-II	Architecture	3	0	0	3	3	10	40	-	50	100	3 hrs
<b>Total</b>					<b>10</b>	<b>4</b>	<b>8</b>	<b>22</b>	<b>20</b>	<b>70</b>	<b>280</b>	<b>100</b>	<b>50</b>	<b>500</b>	

**L-Lecture**

**S-Studio**

**P-Practical**

**SE - Studio Exercise**

**Minimum Marks for passing**

**CIE- Continuous Internal Evaluation**

**SEE- Semester End Examination**

**PA-Progressive Assessment**

**CP-Class Participation**

**CA-Compulsory Audit**

PC - Professional Core; BS- Building Science and Applied Engineering; PE- Professional Elective; OE- Open Elective  
 PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.  
 Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,  
 For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together



**Karnatak Law Society's**  
**G O G I E I N S T I T U T E O F T E C H N O L O G Y , B E L A G A V I - 0 8**  
**Bachelor of Architecture**  
**SCHEME OF TEACHING AND EXAMINATION**



**Department :Architecture**

**Semester: X**

Subject Stream	Subject Code	Course Type	Subject Title	Teaching Department	Contact Hrs				Credits	Marks				Duration of Exam	
					L	S	P/SE	Total		CIE		SEE			Total
										CP	PA	VIVA	EXAM		
DESIGN	18DES10.1N	PC	Architectural Design Project	Architecture	0	10	-	10	15	10	40	50	-	100	-
HUMANITIES	18HUM10.1N	SEC	Constitutional Law	Architecture	2	0	-	2	2	20	80	-	-	100	-
		OE	Open Elective		2	0	-	2	2	-	50	-	50	100	3 Hrs
				<b>Total</b>	4	10	-	14	19	30	170	50	50	300	-

**L-Lecture**

**S-Studio**

**P-Practical**

**SE - Studio Exercise**

**Minimum Marks for passing:**

**CIE- Continuous Internal Evaluation**

**CP-Class Participation**

**SEE- Semester End Examination**

**PA-Progressive Assessment**

**PC - Professional Core; BS&AE- Building Science and Applied Engineering; PE- Professional Elective;**

**OE- Open Elective(Offered by other engineering departments)**

**PAECC - Professional Ability Enhancement Compulsory Courses; SEC - Skill Enhancement Courses.**

**Theory, Studio and Lab Marks (CIE) : 50%, Term Work/ Viva/Lab(SEE) : 40% Theory Marks (SEE) : 40%,**

**For a pass in a course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together**

**CA-Compulsory Audit**

## DISSERTATION (Thesis Part-I)

<b>Course Code</b>	<b>18DES9.1N</b>	<b>Credits</b>	<b>8</b>
<b>Course type</b>	<b>PAECC</b>	<b>CIE Marks</b>	<b>50</b>
<b>Hours/week: L-T-P</b>	<b>6 HRS ( 2 Lecture+4 Studio)</b>	<b>SEE Marks</b>	<b>50</b>
<b>Total Hours:</b>	<b>84 Hrs</b>	<b>SEE Duration</b>	<b>Viva Voce</b>

### Course learning objectives:

- 1.To understand what is `Research`, various methods of research and its applications.
- 2.To understand the role of research/study in defining the Issue/Phenomenon while dealing with an Architectural project.
- 3.To identify the Thesis topic based on Architectural Issue/Phenomenon, discuss its relevance in the present context and present it in the form of Synopsis.
- 4.To illustrate the process of research through documentation, analysis and representation with the help of Literature study and Case studies.

#### **UNIT 1: Introduction**

**5 Hours**

Introduction to `Research` in general, various Research methods and its applications in the field of design, Research in the Architectural context, various methods of research influencing and defining Architectural projects.

#### **UNIT II: Synopsis**

**15 Hours**

Introduction to the Thesis project by identifying /emphasizing the Issue or Phenomenon which should become focus/aim of the study. Write Architectural Synopsis that shall constitute the Title of Thesis, Elaborations on the Topic, Objectives of Thesis, Hypothesis and Methodology.

#### **UNIT III:Literature Study**

**49 Hours**

Introduction of the topic and Intention of Thesis, Dictionary meanings of the key words,  
a) Elaboration on the Issue/Phenomenon: Characteristics and Historical Aspects.  
b) Architecture dealing with the Issue/Phenomenon: Chronological documentation of Architecture dealing in those phenomena, Opinions of Experts on the phenomenon on the issue and architecture dealing with the issue.

#### **UNIT IV: Selection of Case Studies (2 Literature and 2 Live Case Studies) 15 Hours**

- a) To identify and present appropriate Literature Case studies that shall demonstrate design techniques dealing with the Issue/Phenomenon.
- b) To identify appropriate Live case studies that shall determine the programme of Architectural Project.

**Reference:**

1. Groat Linda N. and Wang David, **Architectural Research Methods**, 2013, John Wiley & Sons.
2. Lucas Raymond, **Research Methods for Architecture**,2016, Laurence King Publishing.
3. Lang Jon, **Creating Architectural Theory: The Role of the Behavioral Sciences in Environmental Design 1987**, Van Nostrand Reinhold Company.
4. Unwin Simon, **Analyzing Architecture 2003**, Psychology Press.

**Scheme of Continuous Internal Evaluation (CIE):**

Components	Progressive Marking	Average of assignments (Two) /activity	Quiz/ Seminar /Project	Class Participation	Total Marks
Maximum Marks:50	40	-	-	10	50
<b>➤Minimum marks required to qualify for SEE: 25 (50%)</b>					

**Scheme of Semester End Examination (SEE):**

1. It will be conducted as 50 marks viva-voce exam and same will be considered for the calculation of SGPA and CGPA.
2. **Minimum marks required in SEE to pass: 20 (40%)**
3. **For a pass in the course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together.**

## ENERGY EFFICIENT ARCHITECTURE

<b>Course Code</b>	<b>18DES9.2N</b>	<b>Credits</b>	<b>03</b>
<b>Course type</b>	<b>BS&amp;AE</b>	<b>CIE Marks</b>	<b>50</b>
<b>Hours/week: L-T-P</b>	<b>5 Hrs (1 Lecture + 4 Studio exercise) per Week</b>	<b>SEE Marks</b>	<b>50</b>
<b>Total Hours</b>	<b>80 Hrs</b>	<b>SEE Duration</b>	<b>Viva Voce</b>

### Course learning objectives:

1. To introduce students to the techniques of reading and understanding the strategies of Energy Efficient Architecture.
2. To enable students to apply the concepts of energy efficient Architecture to building design.

### **UNIT I: Introduction to Energy Efficient Architecture and Building Rating Systems** **16 Hours**

- a. Introduction to Energy Efficient Architecture, need for Energy Efficient Architecture, components of Energy Efficient Architecture like Energy Efficient Materials, efficient building systems, Energy Efficient solar passive / active systems, efficient use of resources. Energy demand of a building, impact of building industry on ecology, carbon footprint, ecological footprint.
- b. Introduction to rating systems like BREEAM, ASHRAEE, LEED, GRIHA and national codes like NBC, ECBC

### **UNIT II: Design Exercise and Methodology** **64 Hours**

- a. Design shall explore few components / strategies of Energy Efficient Architecture like Energy Efficient Materials and their assembly, Solar passive shading strategies for design of critical facade and roof. This exercise shall be demonstrated through design of critical facade for buildings designed in the earlier semesters with requisite climatic context.
- b. The exercise shall comprise of various stages like site selection and analysis, reading the context, case study analysis, data collection, conceptual design sketches, design drawings and final design submission. The design shall be explored through softwares like Climate Consultant, Ecotect, Sketchup and others.

### **Course Delivery Methods**

1. Lectures
2. Case study Presentation
3. Site Study
4. Design Discussions

### **Assessment Methods**

1. Case study Assessment
2. Design Reviews
3. Design Viva



**References:**

1. Givoni Baruch, "Passive and Low Energy Cooling of Buildings", Van Nostrand Reinhold, New York, 1994.
2. Sodha, M., Bansal, N. K., Bansal, P. K., KuMEB, A., and Malik, M. A. S., "Solar Passive Buildings", Pergamon Press, Oxford, 1986.
3. Bansal Narendra, K., Hauser Gerd and Minke Gernot, "Passive Buildings Design: A Handbook of Natural Climatic Control", Elsevier Science, Amsterdam, 1994.
4. Goulding, John, R., Lewis, Owen, J., and Steemers, Theo, C., "Energy in Architecture", Bastford Ltd., London, 1986
5. Day lighting in Buildings Source Book; LBNL and International Energy Agency; 2008.
6. Lam, William M.C.; Perception and Lighting as Form Givers for Architecture, 1968.
7. Koenigsberger O.H., Ingersoll T.G., Mayhew Alan, Szokolay S.V., "Manual of Tropical Housing and Building", Universities Press, Hyderabad, Telangana, 1975 and onwards.
8. National Building Code of India 2005, Bureau of Indian Standards, Govt. of India, New Delhi, 2005 onwards
9. Energy Conservation Building Code Rules, 2018, Bureau of Energy Efficiency, Govt. of India, New Delhi, 2018.

**Scheme of Continuous Internal Evaluation (CIE):**

Components	Portfolio Marking	Average of assignments (Two) /activity	Quiz/ Seminar /Project	Class Participation	Total Marks
Maximum Marks:50	40	-	-	10	50
➤ Minimum marks required to qualify for SEE: 25 (50%)					

**Scheme of Semester End Examination (SEE):**

1. It will be conducted as 50 marks viva-voce exam and same will be considered for the calculation of SGPA and CGPA.
2. Minimum marks required in SEE to pass: 20 (40%)
3. For a pass in the course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together

## Elective II

<b>Course Code</b>	<b>18DES9.3N</b>	<b>Credits</b>	<b>3</b>
<b>Course type</b>	<b>PE</b>	<b>CIE Marks</b>	<b>100</b>
<b>Hours/week: L-T-P</b>	<b>4 HRS ( 2 Lectures ,2 Studio Exercises)</b>	<b>SEE Marks</b>	<b>-</b>
<b>Total Hours:</b>	<b>56 HRS</b>	<b>SEE Duration</b>	<b>-</b>

### 18DES9.31 INTERIOR DESIGN

#### Course learning objectives:

1. To introduce the concept of interior design.
2. To understand the various components of interior space, treatment and finishes for the same.

Introduction to Interior Design. Definition and process of interior design- principles and elements like space, line, forms, light, color, texture and pattern –introduction to the design of interior spaces as related to function, themes, concepts and anthropometry.

Students shall explore an interior space and analyze the principles and elements. Components of Interior Space-Interior Treatment and Finishes

Treatment of components such as floors, ceilings, walls, partitions, window treatments, accessories etc., in terms of their choice and design related to materials, methods of construction, color and texture based on functional, aesthetic and psychological criteria.

The students shall prepare a material palette to understand the application of materials.

Components of Interior space Lighting and Interior Landscape - Understanding various types of lighting and lighting fixtures, their effects and application in different contexts. Interior landscape elements: rocks, plants, water, paving and artifacts.

Students are expected to do a literature case study to understand the ambience created by lighting and landscape in interior spaces as well as in exterior spaces.

Design Exercise: A functional space is introduced to students as a design problem. Students are required to do the live case study to understand the design process. Further the study culminates into a detailed interior design project.

Design Methodology: The entire Design Development process comprises of various stages like understanding the significance of principles and elements of interior design. To understand the role of its components influencing design of an interior space through various case studies, concept, conceptual design sketches, study models, design drawings and final design submission.

#### References:

1. Francis .D.K. Ching, Interior Design Illustrated, V.N.R. Pub., NY 1987.
2. John Kurtich& Garret Eakin, Interior Architecture, VNR, New York, 1993
3. Rezmikoff, Interior Graphic and Design Standards, Whitney Library of Design, New York,1986

## **18DES9.32 FURNITURE DESIGN**

### **Course learning objectives:**

1. The course provides a historical underpinning to the student's understanding of the furniture field.
  2. To familiarize the students about the knowledge of furniture design and various aspects involved in the Design of furniture for various spaces.
  3. To enable the students to learn about the types and importance of furniture, know about the selection, care and arrangement of furniture.
- 
- 1) Study of origins: modern design and the major schools and philosophies of 20th Century furniture design. This ranges from the 19th century roots of the Industrial Revolution, the Arts and Crafts movement, European design movements such as the Vienna Werkstatte and the Bauhaus, the development of the first international styles such as Art Nouveau, Art Deco and Modernism. Study of furniture forms by contemporary artists and designers.
  - 2) Emphasis and discussions of the social, economic and cultural context of furniture on the evolution of the domestic realm and the role of furniture within it.
  - 3) Study of Anthropometry and Ergonomics in relation to various furniture, diagrammatic representation through charts.
  - 4) Furniture Forms and Their Influence on Our Emotional Responses.
  - 5) Importance of furniture in relation to Interiors: study of shapes, forms and patterns of furniture.
  - 6) Study of various design technologies and materials used to manufacture furniture.
  - 7) Environmental conditions influencing furniture designs such as: Climatic, social, economic.
  - 8) Techniques of finishing the Surfaces: Wood and Metal Paints, Polishes and varnishes etc: hand painting, brush painting, roller, spray.

### **References:**

1. **Stuart Lawson, Furniture Design: An Introduction to Development, Materials, Manufacturing, Laurence King Publishing, London 2013 .**
2. **Jerryl Habegger , Sourcebook of Modern Furniture , W. W. Norton & Co. Pennsylvania 2005.**
3. **Andrea Mehlhose, Modern Furniture: 150 Years of Design, H.F.Ullmann Publishing, Germany 2009.**

### **18DES 9.33.PARAMETRIC DESIGN**

Parametric design is a process based on algorithmic thinking that enables the expression of parameters and rules that, together, define, encode and clarify the relationship between design intent and design response.

This course aims to introduce and give an overview of:

1. Introduction to Parametric design modeling in Architecture.
2. Introduction to elements of Parametric design- Programming, Geometry, Patterns and Design space exploration.
3. Introduction to parametric design software - Mc-Neel Rhinoceros and Grasshopper 3D.
4. Exploration of parametric modeling techniques with the basic Architectural design problems and finding family of solution outcomes. eg.: Elements of Architecture, facade solutions, Form finding, etc.
5. Post-production - Digital fabrication techniques- Sectioning, Tessellating, Folding, Contouring and Forming
6. Physical Model building.

#### **References:**

1. **Woodbury Robert: Elements of Parametric design, Routledge, UK, 2010**
2. **Iwamoto Lisa: Digital Fabrications- Architecture and Material Techniques, Princeton Architectural Press, New York, USA, 2009**
3. **KhabaziZubin: Generative Algorithms, Morphogenesisim, E-Book, 2010**
4. **Payne Andrew and Rajaalssa: Grasshopper Primer, e-book, 2009**

### **18DES9.34 ECO SENSITIVE DESIGN**

Rapid Urbanization results in increased population and industrialization, impacting the urban spaces and the environment. When not managed properly it can affect the environment. The major impacts due to urbanization are climate change, deforestation, and population growth. There is a need for green infrastructure, an environment-sensitive approach as a tool to facilitate the necessary shift from industrialization to the eco-sensitive age. Eco Sensitive design is both a principle and an approach. This approach involves in the application of sensitive environmental factors into a design that minimizes the negative effects on the ecology.

The elective will give an overview of Eco Sensitive Design philosophy and will be exploring the understanding and application of Eco Sensitive Design strategies.

The Elective aims to develop an understanding of Environment & Ecology, the techniques that are required for the design of buildings and their surroundings in a climate-responsive manner.

The elective gives a brief understanding of the Fundamentals of Environment & Ecology, the definitions, and concepts of ecosystem and ecology.

The course introduces and gives an overview of:

- a. Introduction to Ecology and Eco Sensitive Design in Architecture.
- b. To understand the correlation between the environment and society.
- c. Eco Sensitive design strategies and construction techniques.
- d. Building materials used for Eco-Sensitive Design.

e. Case Studies of Eco-Sensitive buildings.

The students, therefore, develop an understanding of how to deal with ecologically sensitive site contexts in a sensitive and holistic way.

**REFERENCES:**

1. Ian L. McHarg,. “ Design with nature”,1995
2. John Simonds,. “ Landscape Architecture: A Manual of Site Planning and Design, 1997.
3. Frank Lloyd Wright,. “Natural Design,Organic Architecture:Lessons for Building Green from an American Original”.
4. Alastair Fuad-Luke,. “The Eco-Design Handbook: A complete Sourcebook for the Home and Office Hardcover,October 2009.
5. “Eco-Design Handbook,The:A complete Sourcebook for the home and O:A complete Sourcebook for the Home and Oddice Paperback,October 2004.
6. Victor Papanek, 'Design for the Real world, Human Ecology and Social Change', Chicago Review Press, 2005
7. Daniel Williams, 'Sustainable Design, Ecology, Architecture and Planning', John Wiley and Sons Inc, NJ, 2007.

Michael D. Murphy,. “Landscape Architecture Theory: An Ecological Approach”2016

**Scheme of Continuous Internal Evaluation (CIE):**

Component s	Submission s and Assignment s	Average of assignment s (Two) / activity	Quiz/Seminar/Project	Class Participat ion	Total Mark s
Maximum Marks: 100	80	-	-	20	100
<ul style="list-style-type: none"> <li>• <b>Note: This subject does not have Semester End Examination (SEE).</b></li> <li>• <b>Minimum marks required to pass CIE: 50 (50%)</b></li> </ul>					

### Elective –III

<b>Course Code</b>	<b>18TEC9.2N</b>	<b>Credits</b>	<b>3</b>
<b>Course type</b>	<b>PE</b>	<b>CIE Marks</b>	<b>100</b>
<b>Hours/week: L-T-P</b>	<b>4 HRS ( 2 Lectures ,2 Studio Exercises)</b>	<b>SEE Marks</b>	<b>-</b>
<b>Total Hours:</b>	<b>56 HRS</b>	<b>SEE Duration</b>	<b>-</b>

#### **18TEC9.21 INTRODUCTION TO BASICS OF DESIGN AND CONSTRUCTION TECHNOLOGY OF HIGHRISE ARCHITECTURE. -**

The major metropolitan cities around the world are unimaginable without High Rise Structures. The stacked area development in these megacities is inconceivable and would be impossible to organize in layers with only a few floor levels. Increasing acceptance and need in Europe, Middle East and Asia of high-rise development has led to the need to understand the complex task of planning this typology.

Various planning processes, belonging to different disciplines go into building of high rise-from project management to site supervision, from foundations and load bearing structures to effects of wind, Façade structures to building systems, fire protection, Elevator installation etc.

This course aims to introduce and give an overview of:

1. The brief History of the High-rise and it as Unique Typology.
2. Socio-Economic Factors influencing High Rise architecture - Rise in Urban population and Density, vehicular Congestion, High Rise buildings as Building-blocks of a city and its skyline.
3. Economic and Urban factors influencing High-rise buildings–Profitability, construction and maintenance costs, Renting and rent estimate, FSI and other Development guidelines.
4. High Rise Building Types and their typical Spatial Organisations, Office organisation and building grid. Advantages and disadvantages of tall buildings, Essential Amenities.
5. Types of High-rise foundations and load bearing structures/systems (direct and indirect load transfer systems).
6. Effects of Wind on high-rise towers like wind loads, ventilation, pedestrian comfort and wind noise, smoke extraction
7. Properties of High-rise facade and facade types.
8. Fire Protection.
9. Elevator Installation.

## References:

1. Eisele, Johann, Cloft, Ellen, "High-Rise Manual; Typology and Design, Construction and Technology". Birkhauser, Boston.
2. Mehta, B, Jashwant, "High-Rise buildings" Bombay, 1978
3. Watson, Donald, "Time-Saver Standards for Urban Design". McGraw Hill Education, 2017
4. Gallion A. B., "The Urban Pattern City Planning And Design". Cbs. 2005.

## 18TEC9.22 GEOGRAPHIC INFORMATION SYSTEM GIS

Geographic information system is a software environment system which comprises the holistic approach towards the representation, recording as well as management of spatial data for analysis and planning. Its application varies largely from urban, ecological, soil, water and resource management. Also the tools and resources available in GIS system can widely be used in analysis of terrain landforms and water flow analysis.

- 1) Introduction to GIS and its applications
- 2) Introduction to various types of maps and map analysis and elements of cartography and its concepts viz. coordinate systems and various types of GIS package systems.
- 3) Introduction types of data, spatial and non-spatial data, data structures, points, lines, polygon, vector and raster, files and file organization, database, data entry, digitizer, scanner, Dbase, files and data formats, data compression.
- 4) Spatial analysis, data retrieval, query, simple analysis, recode, overlay, vector data analysis, raster data analysis, modelling in GIS, digital elevation model, DTM, cost and path analysis.
- 5) Types of output data, display on screen, printer, plotter, other output devices, sources of errors, types of errors, elimination, accuracies.
- 6) Resource management, agriculture, soil, water, resources management, cadastral records and LIS, integration of Remote Sensing in GIS, knowledge based techniques.
- 7) Representation of small GIS project by actual application to familiarize the students with the concepts and application of GIS in database management and real world applications.

## References:

1. Woodbury Robert: Elements of Parametric design, Routledge, UK, 2010
2. Iwamoto Lisa: Digital Fabrications- Architecture and Material Techniques, Princeton Architectural Press, New York, USA, 2009
3. Khabazi Zubin: Generative Algorithms, Morphogenesis, E-Book, 2010
4. Payne Andrew and Rajaa Issa: Grasshopper Primer, e-book, 2009
5. Eisele, Johann: High-Rise Manual, Birkhauser Verlag AG, 2003
6. Wheeler. Stephen M.: Planning for Sustainability: Creating livable, equitable and ecological communities, Third Edition, 2013
7. Reinventing Dharavi- An Ideas Compendium, Urban Design Research Institute (UDRI), 2017

### **18TEC9.23 COST-EFFECTIVE ARCHITECTURE.**

Cost – effective architecture is all about design and construction that optimizes the various aspects of construction without reducing the quality of the final product. Cost – effectiveness does not mean sub-standard or poor quality structure. It involves strategies intended to optimize resources, technology, material utilization and maximum efficiency of the structure.

This course aims to introduce and give an overview of :

- 1) Meaning of Cost-effectiveness in architecture.
- 2) Costs involved during building construction.
- 3) Factors influencing application of cost-effective techniques in construction.
- 4) Cost-effective design strategies and construction techniques.
- 5) Cost-effective building materials.
- 6) Contributions of organizations like Hunnarshala Foundation, COSTFORD, Dharmalay Institute and others in propagating cost – effectiveness in architecture.
- 7) Case Studies of cost-effective buildings.

#### **References:**

1. Laurie Baker, Houses: How to Reduce Building Costs, COSTFORD: Center of Science and Technology for Rural Development.
2. Laurie Baker, A Manual for Cost Cuts for Strong Acceptable Housing, COSTFORD: Center Of Science and Technology For Rural Development.
3. Gernot Minke, Earth Construction Handbook: The Building Material Earth in Modern Architecture, WIT Press, Southampton, Boston.
4. Environment Friendly Indian Building Material Technologies for Cost Effective Housing, SocietyFor Excellence In Habitat Development, Environment Protection and Employment Generation (SHEE)
5. Demonstrating Cost Effective Technologies (A Case Study of Bawana Industrial Workers Housing Project) Building Materials & Technology Promotion Council (BMTPC)Ministry of Housing and Urban Affairs, Government of India.
6. Utilisation of Recycled Produce of Construction & Demolition Waste: A Ready Reckoner, Building Materials & Technology Promotion Council (BMTPC)Ministry of Housing and Urban Affairs, Government of India.

<b>Components</b>	<b>Submissions and Assignments</b>	<b>Average of assignments (Two) / activity</b>	<b>Quiz/Seminar/Project</b>	<b>Class Participation</b>	<b>Total Marks</b>
Maximum Marks: 100	80	-	-	20	100

- **Note: This subject does not have Semester End Examination (SEE).**
- **Minimum marks required to pass CIE: 50 (50%)**



## PROFESSIONAL PRACTICE-II

<b>Course Code</b>	<b>18HUM9.1N</b>	<b>Credits</b>	<b>3</b>
<b>Course type</b>	<b>PAECC</b>	<b>CIE Marks</b>	<b>50</b>
<b>Hours/week: L-T-P</b>	<b>3 Hrs. (Lectures) per Week</b>	<b>SEE Marks</b>	<b>50</b>
<b>Total Hours</b>	<b>42 Hrs</b>	<b>SEE Duration</b>	<b>3 Hours</b>

### Course learning objectives:

- 1) To understand the process of Contract Administration and supervision
- 2) To understand Arbitration, Valuation and dilapidation
- 3) To understand the Building byelaws and Easements.
- 4) To understand the General Laws

### UNIT I: Contract Administration and Supervision

**08 Hours**

- a) Meaning and purpose of supervision, site visits, site office, site meetings, coordination with various agencies, site book, site instructions and clerk of works.
- b) Execution of contract - Joint measurements, checking running bills with reference to measurement book, different certificates by architect—interim, penultimate, virtual completion and final certificate; defects liability period, latent and patent defects, prime cost and provisional sum.
- c) Contract administration: Overview of procedures in contract administration including financial aspect, bar chart and CPM chart.

### UNIT II: Arbitration

**10 Hours**

- a) Introduction, definition, advantages and disadvantages of Arbitration, Conciliation Act 1996, difference between Arbitration and Conciliation.
- b) Arbitrator, umpire, order of reference, selection of arbitrator, powers and duties of arbitrators.
- c) Conduct of Arbitration proceedings, Arbitration award and its implementation.

**UNIT III: Valuation and Dilapidation****10 Hours**

- a) Introduction to valuation, definitions, essential characteristics, classification of value, purpose of valuation. Various terms used in valuation, study of valuation tables.
- b) Various methods of valuation, factors affecting valuation, specimen valuation report based on land and building method and on rental method.
- c) Dilapidation—definition, schedule of dilapidation report of typical load bearing mangalore tiled ground floor building and three storied R.C.C. building. Physical, economic life of buildings and obsolescence.

**UNIT IV: Building Byelaws and Easements****07 Hours**

- a) Building bye laws: Introduction, importance of building bye-laws, various definitions, building license, foundation and supervision certificate, colour codes plans and site plan, Completion certificate (CC), setbacks and F.A.R. height limitations, parking, details for residential and commercial buildings, division of plots and plot coverage.
- b) National building code, purpose of NBC, building line, accessibility, residential lay-outs, zoning regulations. Emerging Bye Laws: Environmental laws, Firefighting laws, Water Harvesting, Solar energy, Wind energy.
- c) Easements: various easement rights, protecting client's interest with reference to easement rights laws related to property and land: tenure of land, types of land holdings, land registration, covenants, trespass and nuisance.

**Self-Learning Topic:** Line diagram of residential building in a standard plot indicating open spaces, F.A.R, plot coverage drainage lines with colour codes as per building bye laws.

**UNIT V: General Laws****07 Hours**

1. Understanding of common law, statute law, equity, criminal law and civil law.
2. Consumer Protection Act 1986.
3. Professional Indemnity Insurance- Insurance against Professional liability.
4. Fire protection and Fire Insurance: Architect's responsibility after fire hazard in any building, Fire Insurance Premium, Reinstatement Clause, Typical Report by Architect on fire loss

**Scheme of Continuous Internal Evaluation (CIE):**

Components	Total of best two tests out of three	Average of assignments (Two)/Activities	Quiz/ Seminar/ Project	Class Participation	Total Marks
MaximumMarks:50	40	-	-	10	50
<b>➤Minimum marks required to qualify for SEE: 25 marks (50%)</b>					

### **Scheme of Semester End Examination (SEE):**

1. It will be conducted for 100 marks of 3 hours duration. It will be reduced to 50 marks for the calculation of SGPA and CGPA.
2. **Minimum marks required in SEE to pass: 20 out of 50**
3. Question paper contains two questions from each unit each carrying 20 marks. Students have to answer One full question from each unit.
4. **For a pass in the course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together**



## ARCHITECTURAL DESIGN PROJECT (Thesis)

<b>Course Code</b>	<b>18DES10.1N</b>	<b>Credits</b>	<b>15</b>
<b>Course type</b>	<b>PC</b>	<b>CIE Marks</b>	<b>50</b>
<b>Hours/week: L-T-P</b>	<b>10Hrs (Studio)</b>	<b>SEE Marks</b>	<b>50</b>
<b>Total Hours:</b>	<b>140 Hrs</b>	<b>SEE</b>	<b>Viva-Voce</b>

### Course learning objectives:

- 1.To present detailed documentation and analytical study of approved Case-studies and present the findings with the help of live and literature study.
- 2.To identify appropriate context and Site, present detailed Site study, present feasibility of Site to demonstrate the Architectural Design Project.
- 3.To formulate design program evolved out of case-study, site study and design intent.
- 4.To present conceptual process and comprehensive Architectural Design with the help of Sketches, Study-models, detailed architectural drawings, physical model and three dimensional models.

#### **Module 1: Case-Study presentations** **20 Hours**

To present two Live and two Literature Case studies with the help of detailed documentation and analytical drawings presenting the details with regards to program, concept, and design.

#### **Module 2: Site study** **20 Hours**

Identify appropriate context and Site that is feasible to demonstrate the Architectural Project. Discuss the context its features and issues, understand the Site and its relation with surrounding context and present the influencing factors. Present detailed analysis of Site with respect to its Location, Surroundings, Edge conditions and other physical features like topography and landscape elements.

#### **Module 3:Program Formulation** **15 Hours**

Project design programme shall be formulated based on the outcome of various Case studies, Context and site study and intentions in design.

#### **Module 4: Design Demonstration** **85 Hours**

Demonstrate the process of design from understanding of Issue, evolving design solutions and demonstrating its implementation through final design.  
Demonstrate detail Architectural project with the help of Sketches, Study-models, Detailed drawings, Physical model and three dimensional models.

## References:

1. Groat Linda N. and Wang David, **Architectural Research Methods**, 2013, John Wiley & Sons.
2. Lucas Raymond, **Research Methods for Architecture**, 2016, Laurence King Publishing.
3. Lang Jon, **Creating Architectural Theory: The Role of the Behavioral Sciences in Environmental Design** 1987, Van Nostrand Reinhold Company.
4. Unwin Simon, **Analyzing Architecture** 2003, Psychology Press.

## Scheme of Continuous Internal Evaluation (CIE):

Components	Progressive Marking	Average of assignments (Two) /activity	Quiz/ Seminar /Project	Class Participation	Total Marks
Maximum Marks:50	40	-	-	10	50
<b>➤Minimum marks required to qualify for SEE: 25 (50%)</b>					

## Scheme of Semester End Examination (SEE):

1. It will be conducted as 50 marks viva-voce exam and same will be considered for the calculation of SGPA and CGPA.
2. **Minimum marks required in SEE to pass: 20 (40%)**
3. **For a pass in the course, a candidate shall secure overall 50% of the maximum marks of the course i.e., CIE+SEE put together.**

## CONSTITUTIONAL LAW

<b>Course Code</b>	<b>18HUM10.1N</b>	<b>Credits</b>	<b>2</b>
<b>Course type</b>	<b>SEC</b>	<b>CIE Marks</b>	<b>100</b>
<b>Hours/week: L-T-P</b>	<b>2 Hrs. (Lectures) per Week</b>	<b>SEE Marks</b>	<b>-</b>
<b>Total Hours</b>	<b>28 Hrs</b>	<b>SEE duration</b>	<b>-</b>

### Course learning objectives:

1. To understand the constitutional values and objectives written in the Indian Constitution
2. To understand the Fundamental rights and duties of an Indian citizen

#### **Module I: Indian Constitution 04 Hours**

- a) Preamble to the Constitution of India
- b) Evolution of Constitutional Law

#### **Module II: Rights and Duties 06 Hours**

- a) Scope and extent of Fundamental Rights under Part III
- b) Details of exercise of rights, limitations and important cases.
- c) Relevance of Directive principles of State Policy Under Part IV
- d) Significance of Fundamental Duties under part IV (a)

#### **Module III: Executive 06 Hours**

- a) Union: President, Vice-President, Prime Minister, Council of Ministers, Parliament and Supreme Court of India
- b) State: State Executive, Governor, Chief Minister, Council of Ministers, Legislature and high courts

#### **Module IV: Constitutional Provision 06 Hours**

Constitutional provisions for scheduled castes and tribes; women and children and backward classes.

#### **Module V: Emergency Powers 06 Hours**

- a) Emergency powers
- b) Major constitutional Amendments.
- c) Electoral Process

#### **References:**

1. Durga Das Basu, "Introduction to the Constitution Of India (student edition)
2. VN Shukla, "Constitution of India"

#### **Course delivery methods**

1. Lectures
2. Assignments

#### **Assessment methods**

1. Assignment assessment

### Scheme of Continuous Internal Evaluation (CIE):

Components	Portfolio Project	Average of two assignments	Quiz/Seminar/Project	Class participation	Total Marks
Maximum Marks	80	-	-	20	100

➤Note: This subject does not have Semester End Examination (SEE).  
➤Minimum marks required to pass CIE: 50 (50%)

