VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI.

Scheme of Teaching and Examinations and Syllabus
M.Arch-DIGITAL ARCHITECTURE
(Effective from the academic year 2022-23)

AS PER COA:

PCC: Professional Core Courses: 50-55%

PSC: Professional supporting Course 20-25%

PCE: Professional Core Elective 15-20%

PAE: Professional Ability Enhancement:10%

OE: Open Elective: 2-5%

NEP 2020 Principles:

Main features:

1. Broad-based

2. Multi-disciplinary

3. Holistic Graduate education with a flexible curriculum

4. Creative combinations of subjects

5. Integration of vocational education

6. Self-learning process

7. Student-centric learning process rather than teaching

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI
Scheme of Teaching and Examinations – 2022 – 23
M.Arch- D I G I T A L   A R C H I T E C T U R E
Choice Based Credit System (CBCS) and Outcome Based Education(OBE)

I SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Hours per Week			Examination					
				Theory	Practical/Studio	SDA	Duration of examination in hours	CIE Marks	SEE Marks		Total Marks	Credits
				L	P	SDA			Theory	Viva /TW		
1	PCC	22DAC 11	Digital design studio -I	2	8	-	-	50	-	50	100	10
2	PCC	22DAC 12	Analytical diagramming and architectural representation	3	1	-	-	50	-	50	100	4
3	PCC	22DAC 13	Digital architecture process theories and history - I	2	-	2	3	50	50	-	100	3
4	PSC	22DAS 14	Digital Fabrication - I	-	1	2	-	50	--	50	100	2
5	PSC	22DAS15	Parametric software	-	1	2	-	50	-	50	100	2
6	MC	22DAS 16	Research methods & IPR	1	-	2	3	50	50	-	100	2
7	AUD	22 AUD17	BOS Recommended online course	Classes and evaluation procedures are as per the policy of the online course providers								PP
8	PEC	22DAE181	Digital materiality and tectonics	00	02	-	--	50		50	100	2
		22DAE182	Performative Design	00	02	-	--					
		22DAE183	Techniques & technologies in Morphogenetic Design	01	01	-	--					
			TOTAL	09	13	08	06	350	100	250	700	25

Note: PCC: Professional Core Course, PSC: Professional Support Course, PEC: Professional Elective Course. AUD-Audit Course

1L-1 Credit, 1P-1 Credit, and **SDA,** 02hours SDA=1 credit, Skill Development Activities (hours include self-exploration, library hours, workshops.

Audit Course/APEC will be an online course recommended from Swayam/MOOC/ Coursera recommended by BOS.

1. **Studio**: Students and course instructor/s to be involved individually or in groups to interact to enhance learning and application skills. The students should interact with the construction industry (small, medium, and large), understand their problems or foresee what can be undertaken for study in the form of research/ case study testing projects, and for creative and innovative methods to solve the identified problem. Students will:
    a. Gain confidence in working along with construction industry professionals.
    b. Work on different software/s(tools)to simulate, analyze and authenticate the output to interpret and conclude.
    c. Handle advanced construction equipment and materials to enhance technical talent.
    d. Involve in case studies and field visits/fieldwork.
    e. Accustom with codes of standards to narrow the gap between academia and the construction industry.
    All activities should enhance students' abilities for employment and/or self-employment opportunities, management skills, Statistical analysis, fiscal expertise, etc.
2. **Skill Development Activities:** They may be in the form of conferences, webinars and webinars, not a fixed slot in timetables.
3. **Viva-voce:** The viva voce shall be conducted for a duration of 20 minutes (per student) for the subjects listed under viva voce for all the semesters.
4. **Audit course/Open Elective:** Online courses which enhance student ability, help in the project, and overall development. May be selected from the list provided and approved by BOS, Architecture.

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II SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Hours /Week Theory (L)	Practical/ Studio (P)	SDA (SDA)	Duration in hours	CIE Marks	SEE Marks Theory	SEE Marks Viva /TW	Total Marks	Credits
1	PCC	22DAC21	Digital design studio -II	2	8	-	-	50	-	50	100	10
2	PCC	22DAC22	Digital architecture process theories and history -2	3	-	2	3	50	50		100	4
3	PCC	22DAC23	Application of digital architecture study on real-time project	-	-	2		50	-	50	100	1
4	PCC	22DAC24	IoT(Internet of Things)	1	1	-	-	50	-	50	100	2
5	PSC	22DAS25	Analysis software	-	2	-	-	50	-	50	100	2
6	PSC	22DAS26	Digital Fabrication - II	2	2		3	50	50	-	100	4
7	PEC	22DAE271	Biomimetic Architecture	2	-	-	-	50	-	50	100	2
		22DAE272	Product Design+ Robotics									
		22DAE273	Optimizing Built Structures									
8	AUD	22 AUD 28	BOS Recommended online course	Classes and evaluation procedures are as per the policy of the online course providers								PP
		TOTAL		**10**	**13**	**04**	**06**	**350**	**100**	**250**	**700**	**25**

Note: PCC: Professional Core Course, PEC: Professional Elective Course.

Note:
1. Internship: All the students shall have to undergo a mandatory internship of 6 weeks during the vacation of II and III semesters. A University examination shall be conducted during III semesters and the prescribed internship credit shall be counted in the same semester The internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do take up/complete the internship shall be declared as fail in the internship course and have to complete the same during the subsequent University examination after satisfying the internship requirements.

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III SEMESTER

Sl. No	Course	Course Code	Course Title	Theory L	P/S/Seminar P	SDA SDA	Duration in hours	CIE Marks	SEE Marks Theory	SEE Marks TW/ Viva	Total Marks	Credits
1	PCC	22DAC31	Digital design studio - III	2	8	-	-	50	-	50	100	10
2	PCC	22DAC32	Parametric urban mapping	1	2	-		50	-	50	100	3
3	PCC	22DAC33	Parametric urbanism	2	-	2	3	50	50	-	100	3
4	PCC	22DAC34	Application of digital architecture on real time project III	-	-	4		50	-	50	100	2
5	PSC	22DAS35	Dissertation Phase I - Pre- Thesis	2	-	1	-	50		50	100	2
6	PSC	22DAS36	Digital Fabrication - III	-	3	-	-	50	-	50	100	2
7	PAE	22 DAE 371	Parametric Landscape Urbanism	2	-	-	-	100	-	--	100	2
		22 DAE 372	Sustainable Urban Design									
		22 DAE 373	Generative Urban Design									
8	PSC	22DAS 38	(Completed during the intervening vacation of the II and III semesters.)06 weeks duration				-	50	--	50	100	3
TOTAL				09	13	07	03	450	50	300	800	27

Note: PCC: Professional Core Courses, PEC: Professional Elective Course. INT-Internship, PSC Professional Supportive Course, AUD- Audit Course, and PP-Passing is mandatory.

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IV SEMESTER

Sl. No	Course	Course Code	Course Title	Theory L	P/S/FW/SM P	SDA	Duration in hours	CIE Marks	SEE Marks Viva Voce	Total Marks	Credits
1	PCC	22DAC41	Project/ Dissertation phase -2	2	16	04	-	50	50	100	20
2	OE	22DAOE42	OPEN Elective offered by other departments offline/or online OE	02	01		-	50	-	50	3
			TOTAL	02	16	04	-	50	50	100	23

Note:

1. Dissertation Phase-2:

CIE marks shall be awarded by a committee comprising of HoD as Chairman, Guide/co-guide if any, and a Senior faculty of the department. The CIE marks awarded for project work phase -2, shall be based on the evaluation of Project Report subjected to plagiarism check, Project Presentation skill and performance in the Question and Answer session in the ratio 50:25:25.

SEE shall be at the end of IV semester. Project work evaluation and Viva-Voce examination (SEE), after satisfying the plagiarism check, shall be as per the University norms.

Open Elective

Open elective to be chosen by students based on their interest offered by other departments/schools or from Swayam/Mooc/Coursera etc, permission for pursuing these courses to be sought from the school. (Minimum of 12 weeks course)

Open elective should be Ian interdisciplinary course which will help to learn another area of study and also helps in project work.

I semester   25

II Semester   25

III Semester   27

IV Semester   23

Total credits   100.