Course outcome (Course Skill Set)

At the end of the course the student will be able to :

Sl. No.	Description	Blooms Level
CO1	Build the tools to thrive in rigorous intellectual and practice environments, where questions about the site and the environment are investigated through design research and design thinking.	L2
CO2	Learn to work collaboratively and in an interdisciplinary manner across scales integrating the understanding of programmatic needs, contextual/environmental conditions, technological challenges, social structures and historical/theoretical meaning.	L3
CO3	To think like a native of a place, understanding of the ecologies of this region, its historical and cultural context and the equitable opportunities and value of urban life	L3
CO4	To understand the cultural stability of the city	L4
CO5	To understand the tools and methodologies to understand urbanism	L4

Program Outcome of this program. (CPM)

Sl. No.	Description	POs
1	The generation of digital tools makes it possible to use parametric design as a way of evolving new information systems, new ways of producing building components and architecture.	PO1
2	The course/project goal is to increase the student's knowledge in this area/field and skills/knowledge in the field of architecture in general	PO2
3	The students will enter the project with varying degrees of knowledge/skills and will subsequently end up at different levels at the end of the course/project.	PO3
4	The individual student must show an increase in the particular skills/knowledge offered and in the field of architecture in general	PO4
5	To critically interpret and understand product design+robotics	PO5

Mapping of COS and POS

	PO1	PO2	PO3	PO4	PO5
CO1	**L**	**L**	**M**	**M**	**M**
CO2	**M**	**M**	**L**	**M**	**M**
CO3	**M**	**M**	**M**	**L**	**H**
CO4	**L**	**L**	**M**	**H**	**H**
CO5	**L**	**M**	**M**	**L**	**H**

H – High , M – Medium, L - Low

Semester- IV

	THESIS			
	Course Code	MDAC481	CIE Marks	50
	Teaching Hours/Week (L:P:SDA)	00:8:00	Viva Marks	50
	Total Hours of Pedagogy	8	Total Marks	100
	Credits	12	Exam Hours	-

Course Learning objectives:

- The objective of the dissertation is to provide an opportunity to the students to prepare independent and original study of a special project of his/her own choice.
- The project provides students an opportunity for academic research to cultivate specialization in the areas of their own interest under the overall guidance of the faculty.
- The objective of the seminar work is to train the students to prepare state of art report by assimilation of concepts / ideas on a chosen topic in the area of Digital Architecture

COURSE CONTENT

Research Content: The dissertation/ thesis is an individual research project that is a major piece of work undertaken by the students. It is a continuation of the Dissertation phase-1 of the previous semester. They are expected to select a topic on a live problem in the industry or a macro-issue having a bearing on performance of the real estate, construction or urban infrastructure industry. The topic should be researchable and involve scientific design of a study, collection and analysis. The aim is to prepare a state of art report on the chosen topic and develop hypothesis to be tested through the research methodology designed for the purpose.

The thesis proposal should include an overview of the proposed plan of work, including the general scope of your project, your basic research questions, research methodology, and the overall significance of your study. In short, the proposal should explain what to study, how to study this topic, why this topic needs to be studied.

Thesis proposals are designed to

- Justify and plan (or contract for) a research project.
- Show how your project contributes to existing research.
- Demonstrate to your advisor and committee that you understand how to conduct discipline specific research within an acceptable time-frame.
- Recommend future study areas for research.

Research Process: Students are required to test their outcome proposals through various methods, including questionnaire surveys and case studies. Students must create an innovative insight on the specific issues.

Thesis work includes processes such as: Research area identification; hypothesis of research topic; literature sourcing and search; aim and objective definition; formulation of methodology; field study planning; survey data collection, analysis and result presentation; literature study; conceptual an empirical :compilation and inference drawing; research study validation through case studies, field application and simulation models; discussion of findings of research findings; study conclusion and recommendation formulations. The progress of the Thesis work is presented and discussed by the student periodically in the classroom environment and progress monitored continuously. This work develops the comprehension and presentation skills of the students. The students are provided guidance from the faculty to channelize their thoughts.

Area of Research: The subject for special study may be conceptual or practical but pertaining to parametric field , computational design , virtual realtor robotics

Presentation: The dissertation Project shall be submitted in the form of drawings, project report, models,

	slides etc. Relevant details/, schematic charts, reports and simulations	
	Teaching-Learning Process	*Critical review with constructive suggestions / feed backs has to be provided by the Guide/ co-guide during the progress of the dissertation.*

Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

Continuous Internal Evaluation: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department one of whom shall be the Guide, or external reviewer whoever takes mid-review on invitation by the department. The CIE marks awarded for the dissertation work shall be based on the evaluation of the dissertation design/project Report, presentation skill, and question and answer session in the periodic reviews. 50% weightage to be given to the design, 25% to the report and presentation, and 25% to question answers.

Viva- Voce Examination:

- The student needs to submit his/her report done throughout the semester, including the data collection for the Viva examination, at least one day prior to the Viva examination to the PG course coordinator/HOD.
- The Viva-voce will be evaluated by external examiners appointed by the University along with PG Course coordinator/ guide/ co-guide or an internal examiner..
- The viva-voce marks list generated is to be signed by both internal and external examiners and submitted to VTU in the sealed cover through the Principal of the institution.

- SEE for dissertation work will be conducted by the two examiners appointed by the University. The SEE marks awarded for the project work shall be based on the evaluation of the thesis work Report, project presentation skill, and question and answer session in the ratio 50:25:25.

Suggested Learning Resources:

Books

- Creswell, J. W; Research Design: Qualitative, quantitative and mixed methods approaches, 2nd Ed., Thousand Oaks: Sage. 2003.
- Kothari, C.R; Research Methodology: Methods and Techniques, New Delhi: WishwaPrakashan. 2005
- Sanoff, H; Visual research methods in design, USA: Van Nostrand Reinhold. 1991

Web links and Video Lectures (e-Resources):

- Thesis Format | Dissertation Format | Paper, Structure, Sample | Leverage Edu

Skill Development Activities Suggested -

- Guest lecture
- Review of research papers3
- Site visits / case studies

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CO3	**M**	**M**	**M**	**L**	**H**
CO4	**L**	**L**	**M**	**H**	**H**
CO5	**L**	**M**	**M**	**L**	**H**

H – High , M – Medium, L - Low