ARC412: Research Methods (2 Credit Units)

Department of Architecture

Covenant University
1. ARC412

1.1. ARC412: Research Methods (2 Credit Units)

Understanding the philosophical bases of research. Research Defined. Types of research. Elements of the research process. Literature review as an essential ingredient of research. Developing Research Skills. Data gathering and analysis. The application of statistical methods. Preparing a Research Proposal. Presentation and evaluation of students individual research proposal. The aim of the course is to introduce the student to basic research in architecture. It will explain the theoretical approaches to research as well as teach the skills of doing research.

MODULE 1: Introduction - An overview of research. Research defined. Characteristics of research; Areas of architectural research concerns; General concepts of research techniques.

MODULE 2: Fundamentals of Research - The fundamentals of research; Classification of systems of inquiry; Positivism, naturalism and critical approaches to research; Classification of systems of inquiry continued; Formulation of hypotheses. Inductive and deductive reasoning. The place of theory, conceptual frameworks and hypotheses in deductive reasoning; Selected Definitions.

MODULE 3: Types of Research - Purposes of research; Types of research: survey, historical, qualitative; case-study/ multiple methods approach. MODULE 4: Research Design and Problem Definition - Research design introduced; Analogies with architectural design; Major components of research design. The research problem: where do they come from? Framing the research problem; Defining sub problems.

MODULE 5: Review of Literature - Sources of literature; Writing the review of literature; Tools of Research.

MODULE 6: Data and Sampling - Data and Method; Nature and types of data; Data for survey research; Survey designs; Sampling and sampling designs.

MODULE 7: Writing Research Proposal - The research proposal; Components of a good research proposal; Structure of a proposal; Guidelines and tips.

MODULE 8: Collecting and Analyzing Data - Field work and data collection; Analyzing data; Software for analyzing data; Statistical analysis for survey designs.

MODULE 9: Writing the Dissertation - Writing the final dissertation report; Guidelines for preparing report; Structure of the report; References, endnotes and appendices.