

**FARWESTERN UNIVERSITY**  
**FACULTY OF ENGINEERING**  
**MASTER OF SCIENCE DEGREE IN CONSTRUCTION PROJECT MANAGEMENT**

Course Title: **Project Work**  
Course Code: CPM 732  
Year/Semester: II/III  
Class Load: 4 hours per week  
Credits: 4 (60 Hrs)  
Evaluation:

	Theory/Report	Practical	Total
Internal	40	-	40
Final (External)	60	-	60
Total	100	-	100

**Course Descriptions and Objective:**

The objective of the project work is to equip the students with skills required to synthesize comprehensively the knowledge gained during course works for a practical application of Construction Management discipline in real life. The project work essentially aims to investigate problems in the management of construction industry, evaluate different scenarios, assess alternative approaches and techniques of construction management and provide best solutions to the complex problems. Each student will also prepare the proposal and plan with theme of the research project, carries out a detailed literature review and formulate the methodology of the research.

Under the supervision and guidance of member/members of faculty, the project will be carried out individually or in a group of 2-3 students and each student is supposed to work on a different case within the same context of the group. The project will be an opportunity for the students to work in a team and provides opportunities for tackling problems and provide best management solutions to Construction industry.

**Teaching Methods:** Lecturers, Group Work, Interaction, Case Studies, Presentation

In the initial phase the faculty may conduct a number of lectures and discussions as to the approach of the project. In the later phase, the students will be left on their own to pursue their work and to consult the faculty whenever any problem crops up. The group works, class interaction, discussion on case studies and students' presentation are strictly conducted. Students should then submit a draft report prior to the final report so that the supervisor can correct the mistakes. Students are required to submit a final project report to the supervisor(s) and program coordinator.

**FARWESTERN UNIVERSITY**  
**FACULTY OF ENGINEERING**  
**MASTER OF SCIENCE DEGREE IN CONSTRUCTION PROJECT MANAGEMENT**

Course Title: **Research Methodology**

Course Code: CPM 731

Year/Semester: II/III

Class Load: 4 hours per week (Theory: 4 Hrs.)

Credits: 4 (60 Hrs)

Evaluation:

	Theory	Practical	Total
Internal	40	-	40
Final (External)	60	-	60
Total	100	-	100

**Course Descriptions and Objective:**

The objective of this course is to provide in-depth knowledge and understanding of various tools and techniques of Research Methodology to the students. After completion of this course students will be able to conduct a research work independently applying the acquired knowledge and skill of Research Methodology.

**Course Contents:**

**UNIT 1: Concept of Research (6 Hrs.)**

- 1.1 Introduction of research
- 1.2 Objective of research
- 1.3 Research process
- 1.4 Criteria of good research
- 1.5 Limitations of research

**UNIT 2: Formulation and Identification of Research Problem (10 Hrs.)**

- 2.1 Identification of research topics of interest
- 2.2 Group discussion
- 2.3 Defining the research problem
- 2.4 Selecting the research problem
- 2.5 Research Questions
- 2.6 Identifying the objectives of the study

**UNIT 3: Literature Review (6 Hrs.)**

- 3.1 Purpose of literature review
- 3.2 Importance of review of literature
- 3.3 Literature search procedure
- 3.4 Sources of literature
- 3.5 Develop a theoretical and conceptual frame work
- 3.6 Citation method

**UNIT 4: Research Design (8 Hrs.)**

- 4.1 Purpose of research design
- 4.2 Importance of research design
- 4.3 Types of research design
- 4.4 Features of a good research design
- 4.5 Hypothesis formulation: Null hypothesis and alternative hypothesis
- 4.6 Errors affecting research design
- 4.7 Preparation of thesis proposal

**UNIT 5: Research Methods (6 Hrs.)**

- 5.1 Types of research: Quantitative and Qualitative
- 5.2 Research tools and techniques: Questionnaire, Interview, Observation, Check-list, Library records and reports.
- 5.3 Selecting tools and techniques for research method
- 5.4 Developing and testing hypothesis

**UNIT 6: Sample Design (6 Hrs.)**

- 6.1 Concept of statistical population
- 6.2 Characteristics of a good sampling procedure
- 6.3 Criteria for selecting a good sampling procedure
- 6.4 Determination of sample size
- 6.5 Sampling methods: simple random sample, systematic sample, stratified random sample.

**UNIT 7: Data Collection (6 Hrs.)**

- 7.1 Importance of data
- 7.2 Sources of data
- 7.3 Questionnaire construction, pretesting of questionnaire.
- 7.4 Selection of appropriate method for data collection.
- 7.5 Methods of data collection: Collection of primary data, Observation method, Interview method, Collection of data through questionnaire (personal interview, telephonic interview, mail survey, internet survey).

**UNIT 8: Processing and Analysis of Data (8 Hrs.)**

- 8.1 Classification of data
- 8.2 Tabulation of data
- 8.3 Techniques of data processing and analysis
- 8.4 Diagrammatic representation of data
- 8.5 Analysis and interpretation of data
- 8.6 Presentation of the study
- 8.7 Conclusion

**UNIT 9: Thesis Writing (4Hrs.)**

- 9.1 Formatting a thesis report
- 9.2 Develop the final thesis report
- 9.3 Writing a bibliography
- 9.4 Power point presentation for thesis defense

**PLAGIARISM**

Plagiarism means copying or using other' ideas or work without acknowledging the original source and/or author. This can be in a variety of forms, from directly quoting someone without acknowledgment, copying and pasting from any available sources including internet, changing some words without acknowledgment and etc. This type of activities of a student in submitting

any assignment will be considered as a serious offence and the university/course instructor will take serious action.

**Indicative References:**

1. Kothari C. R., *Research Methodology*, Wishwa Prakashan, New Delhi, India.
2. Wolf, Howard K. and Pant Prem R., *Social Science Research and Thesis Writing*, Buddha Academic Publishers and Distributers, Kathmandu, Nepal.