



ଓଡ଼ିଶା ରାଜ୍ୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ସମ୍ବଲପୁର, ଓଡ଼ିଶା  
Odisha State Open University, Sambalpur, Odisha  
Established by an Act of Government of Odisha.

## Post Graduate Certificate in Research Methodology (PGCRSM)

|                  |   |
|------------------|---|
| Programme Name   | : Post Graduate Certificate in Research Methodology |
| Programme Code   | : PGCRSM  |
| Eligibility      | : +3 Pass   |
| Minimum Duration | : 6 Months  |
| Maximum Duration | : 2 Years   |
| Programme Fee    | : ₹ 2500/-  |
| Medium of Study  | : English   |

### Programme Details:

The aim of this course is to impart research skills to the beginners and help to improve the quality of research by the existing researchers. It also encompasses the understanding and application of appropriate research design, statistics, and the use of the computer for data analyses, report writing and presentation. The course also introduces the key conceptual issues of each research method, as well as giving practical guidance. It covers the series of research methodology contents: from problem formulation, to design, to data collection, analysis, reporting and dissemination. The course has the dual aims of equipping students with conceptual understandings of current academic debates regarding different methods, and the practical skills to put those methods into practice.

### Learning Objectives:

This certificate course will provide students with:

- A concrete understanding of the methods of doing research, data collection and analysis, report writing
- An understanding to identify the research gaps by reviewing the existing literatures on the concerned topic and state the research questions
- Identifying the difference between qualitative and quantitative data collection methods and analysis strategies

**Duration of the Course** – Minimum: 6 months, Maximum: 2 years.

**Conduct of Classes** – Weekend for 4 hours (preferably on Sundays)

**Total Counselling Sessions** – 16hrs, Study Hours – 480 hours.

**Evaluation** – Based on Assignments, Project Work and Term end Examinations

**Target Group:** Students pursuing Post-Graduation courses in any discipline and research scholars and other teaching professionals can join to enhance knowledge on research methods and methodology

**Eligibility Criteria:**

Minimum Qualification - +3 pass

**Pedagogy:** The Course shall be taught with Self Learning Materials, e-learning materials, OERs, Project Assignments.

**Course Structure:**

PGCRSM 01 Foundations of Research

PGCRSM 02 Qualitative and Quantitative Research

PGCRSM 03 Use of ICTs in Research

PGCRSM 04 Project Work.



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**SYLLABUS OF**  
**POST GRADUATE CERTIFICATE IN RESEARCH**  
**METHODOLOGY (PGCRSM)**  
**For Academic Session 2019-2020**

**Duration: 6 Months**

**Total Credit: 16**

| <b>Semester-I</b>  |                                       |                |
|--------------------|---------------------------------------|----------------|
| <b>Course Code</b> | <b>Course Title</b>                   | <b>Credits</b> |
| PGCRSM -01         | Foundations of Research               | 4              |
| PGCRSM -02         | Qualitative and Quantitative Research | 4              |
| PGCRSM -03         | Use of ICTs in Research               | 4              |
| PGCRSM -04         | Project Work                          | 4              |

| <b>PGCRSM -01 : Foundations of Research</b> |   | <b>4Credits</b> |
|---|---|-----------------|
| <b>Block-1</b>                              | <b>Introduction to Research</b>   |                 |
|   | Unit-1: Meaning, Objectives, Motivation, Utility of Research  |                 |
|   | Unit-2: Types and Methods of Research   |                 |
|   | Unit-3: Scientific Method and Its Characteristics   |                 |
|   | Unit-4: Theory Building and Understanding the Language of Research (Concept, Construct, Definition, Variable) |                 |
|   | Unit-5: Research Ethics and Empiricism  |                 |
| <b>Block-2</b>                              | <b>Problem Identification and Formulation in Research</b>   |                 |
|   | Unit-1: Social Research Process   |                 |
|   | Unit-2: Literature Review Process and Formulation of Research Questions                                       |                 |
|   | Unit-3: Hypothesis- Characteristics and Types   |                 |
|   | Unit-4: Hypothesis Testing –Logic and Importance  |                 |
| <b>Block-3</b>                              | <b>Research Design</b>  |                 |

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|                   | Unit-1: Concept and Importance of Research Design  |                  |
|                   | Unit-2: Types and Uses of Research Design  |                  |
| <b>PGCRSM -02</b> | <b>Qualitative and Quantitative Research</b>   | <b>4 Credits</b> |
| <b>Block-1</b>    | <b>Data, Measurements and Scaling Techniques</b>   |                  |
|                   | Unit-1: Types of Data: Qualitative and Quantitative data and its Approaches  |                  |
|                   | Unit-2: Levels and Techniques of Measurement and Sociometry  |                  |
|                   | Unit-3: Validity, Reliability and Triangulation Method   |                  |
|                   | Unit-4: Scaling Techniques: Comparative (Rank Order, Paired Comparison and q-sort) and Non-comparative (Likert Scale, Thurston Scale, Semantic Differential Scale) |                  |
| <b>Block-2</b>    | <b>Sampling Techniques</b>   |                  |
|                   | Unit-1: Introduction to Sampling: Concepts of Population, Sample, Sampling Frame, Sampling Error, Sample Size, Characteristics of a good sample.                   |                  |
|                   | Unit-2: Types of Sampling-Probability and Non-Probability  |                  |
|                   | Unit-3: Determining size of the sample– Practical considerations in sampling and sample size.  |                  |
| <b>Block-3</b>    | <b>Tools and Techniques of Data collection and Field Work Practices</b>  |                  |
|                   | Unit-1: Sources of Data Collection: Primary and Secondary  |                  |
|                   | Unit-2: Interview Schedule and Questionnaire   |                  |
|                   | Unit-3: Interview Method- Types; Selecting Respondents; Rapport; the Interview Guide; the Interview situation; recording   |                  |
|                   | Unit-4: Focused Group Discussions (FGDs), The Case Study Method, Oral Histories, Life Histories, PRA and RRA Techniques  |                  |
|                   | Unit-5: Participant Observation and Ways of Interviewing   |                  |
|                   | Unit-6: Ethnographic Field Research  |                  |
| <b>Block-4</b>    | <b>Qualitative Data Analysis</b>   |                  |
|                   | Unit-1: Qualitative Data Formatting and Processing   |                  |
|                   | Unit-2: Content Analysis, Narrative Analysis and Discourse Analysis  |                  |
|                   | Unit-3: Grounded Theory Methodology and Interpretative Analysis  |                  |
| <b>Block-5</b>    | <b>Quantitative Data Analysis</b>  |                  |
|                   | Unit-1: Descriptive Statistics-  |                  |
|                   | Unit-2: Measures of Central Tendency   |                  |
|                   | Unit-3: Measures of Dispersion and Variability   |                  |
|                   | Unit-4: Characteristics of Association, Correlation and Regression   |                  |
|                   | Unit-5: Statistical Inference: Testing of Hypothesis   |                  |
| <b>PGCRSM 03</b>  | <b>Use of ICTs in Research</b>   | <b>4Credits</b>  |
| <b>Block- 1</b>   | <b>Use of Computer Applications in Research</b>  |                  |
|                   | Unit-1: Understanding and Using the Library and the Internet for Research  |                  |
|                   | Unit-2: Computer for Data Processing   |                  |
| <b>Block-2</b>    | <b>SPSS and Data Analysis</b>  |                  |
|                   | Unit-1: Use of SPSS for Data Analysis and Interpretation   |                  |
|                   | Unit-2: Tabulation and Graphical Representation of Data  |                  |

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|                   | Unit-3: Using SPSS in Report Writing                                    |
| <b>Block-3</b>    | <b>Citation, References and Bibliography</b>                            |
|                   | Unit-1: Formats and Styles (APA, Chicago, MLA, ASA)                     |
|                   | Unit-2: Software for Reference Management and Detection of Plagiarism   |
|                   | Unit-3: Quoting, Paraphrasing, and Avoiding Plagiarism                  |
| <b>PGCRSM -04</b> | <b>Project Work</b> <span style="float: right;"><b>4 Credits</b></span> |
| <b>Block-1</b>    | Unit-1: How to write a research proposal or report                      |
|                   | Unit-2: Alternative Ways to Present Research                            |
| <b>Block-2</b>    | <b>*Project Report/Case Study</b>                                       |

\* 04 Credits will be awarded for the Project Report