



BIJU PATNAIK UNIVERSITY OF TECHNOLOGY, ODISHA

ବିଜୁ ପଟ୍ଟନାୟକ ବୈଷୟିକ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ଓଡ଼ିଶା



**One-Week online Faculty Development Programme on
Research Methodology and Grant writing (RMGW)
In association with Association of Indian Universities - Academic and
Administrative Development Centre (AIU-AADC-BPUT)**

The primary objectives of conducting a Faculty Development Program (FDP) on Research Methodology and Grant Writing (RMGW) are:

1. **Enhance Research Skills:** To equip faculty members and researchers with advanced knowledge and practical skills in research methodology, enabling them to design, conduct, and analyze research studies effectively.
2. **Promote Grant Writing Proficiency:** To provide participants with the tools and techniques required to write compelling grant proposals, increasing their chances of securing funding for research projects.
3. **Foster Ethical Research Practices:** To emphasize the importance of ethical considerations in research, ensuring that participants adhere to integrity and transparency in their work.
4. **Encourage Interdisciplinary Collaboration:** To facilitate networking and collaboration among researchers from diverse fields, promoting interdisciplinary research initiatives.
5. **Boost Research Output:** To enhance the quality and quantity of research output by empowering participants with the knowledge to publish in high-impact journals and present at international conferences.
6. **Support Institutional Growth:** To contribute to the overall academic and research growth of institutions by building a pool of skilled researchers and grant writers.

Day 1: Foundations of Research Methodology (24th March 2025)

Time	Session	Speaker/Facilitator
9:00 AM - 9:30 AM	Inauguration & Opening Remarks	Chief Guest/Organizer
9:30 AM - 11:30 AM	Session 1: Introduction to Research Methodology <ul style="list-style-type: none">• Definition, purpose, and scope of research.• Types of research: Qualitative vs Quantitative, Applied vs Basic	Dr. Bibhuti Bhusan Mukharjee
11:30 AM - 11:45 AM	Break	
11:45 AM - 01:45 PM	Session 2: Conducting an Effective Literature Review <ul style="list-style-type: none">• Sources of literature.• Tools for managing references (e.g., Mendeley, Zotero).• Research Problem Identification, Developing research questions and hypotheses.	Dr. Suraj Sharma
01:45 PM - 03:00 PM	Lunch Break	
03:00 PM - 05:00 PM	Session 3: Research Design and Problem Formulation <ul style="list-style-type: none">• Descriptive, experimental, and exploratory designs.• Sampling methods and data collection techniques.• Examples of research designs in various disciplines.	Dr. Jaya Shankar Singh

Day 2: Data Collection (25th March 2025)

Time	Session	Speaker/Facilitator
9:00 AM - 11:00 AM	Session 4: Quantitative Data Collection <ul style="list-style-type: none">• Surveys, questionnaires, and structured interviews.• Tools for survey design (e.g., Google Forms, Qualtrics).• Focus Group, Unstructured Interview and Observation Techniques.	Dr. Jaya Shankar Singh
11:00 AM - 11:30 AM	Break	
11:30 AM - 01:30 PM	Session 5: Introduction to Quantitative Analysis <ul style="list-style-type: none">• Statistical Packages: SPSS, R, Python.	Dr. Sanjaya Kumar Panda
01:30 PM - 03:00 PM	Lunch Break	
03:00 PM - 05:00 PM	Session 6: Secondary Data and Big Data Sources <ul style="list-style-type: none">• Importance and challenges of using secondary data.• Introduction to big data tools.	Dr. Jaya Shankar Singh

Day 3: Writing Research Proposal (26th March 2025)

Time	Session	Speaker/Facilitator
9:00 AM - 11:00 AM	Session 7: Drafting Research Proposal, Evaluating a Research Proposal, Grant Writing <ul style="list-style-type: none">• Abstract, Objectives, Methodology, Timeline, and Budget; Exploring Funding Agency and Understanding their Expectations; Understanding Priorities. Evaluation Criteria, Reviewing Successful Proposals; Analysis of Real Examples from Various Fields. Preparing accurate budgets for proposals, justifying budget of the proposal,	Dr. Mohan Kumar Kesarla
11:00 AM - 11:30 AM	Break	
11:30 AM - 01:30 PM	Session 8: Publishing and Presentation Skills <ul style="list-style-type: none">• Writing Research Papers: Structure, style, and choosing the right journal, Understanding the peer-review process. Peer Review and Revisions, Presentation Skills, Preparing effective research presentations.• Research Dissemination: Open Access vs Subscription Journals, Benefits and challenges of publishing in open access. Research Communication for Non-Academic Audiences, writing for policymakers and the public, ethics and avoiding plagiarism, data falsification and fabrication	Dr. Bikramaditya Das
01:30 PM - 03:00 PM	Lunch Break	
03:00 PM - 05:00 PM	Session 9: Intellectual Property Rights	Prof. Sarat Kumar Swain

Day 4: Data Analysis (27th March 2025)

Time	Session	Speaker/Facilitator
9:00 AM - 11:00 AM	Session 10: Hypothesis Testing using Parametric Test	Dr. Chandrakanta Sahoo
11:00 AM - 11:30 AM	Break	
11:30 AM - 01:30 PM	Session 11: Qualitative Analysis using Content analysis, thematic analysis, and NVivo	Dr. Jaya Shankar Singh
01:30 PM - 03:00 PM	Lunch Break	
03:00 PM - 05:00 PM	Session 12: Hypothesis Testing using Non- Parametric Test	Dr. Chandrakanta Sahoo

Day 5: Advanced Research Techniques (28th March 2025)

Time	Session	Speaker/Facilitator
9:00 AM - 11:00 AM	Session 13: Interdisciplinary Research Approaches • Importance and techniques of cross-disciplinary research, Brainstorming ideas for interdisciplinary research.	Dr. Soumendra Patra
11:00 AM - 11:30 AM	Break	
11:30 AM - 01:30 PM	Session 14: Emerging Research Trends • AI in research, blockchain for data security, etc.	Dr. Sanjaya Kumar Panda
01:30 PM - 03:00 PM	Lunch Break	
03:00 PM - 05:00 PM	Valedictory, Feedback, Certificate distribution and Closing remarks.	

Expert Details



Dr. Bibhuti Bhusan Mukharjee
Associate Professor
Department of Civil
Engineering, CUPGS, BPUT
Rourkela



Dr. Suraj Sharma
Associate Professor, Department
of Computer Science and
Engineering school of studies
Engineering and Technology,
Guru Ghasidas Vishwavidyalaya,
Bilaspur



Dr. Jaya Shankar Singh
Assistant Professor, School of
Management, NIT-Rourkela



Dr. Sanjaya Kumar Panda
Assistant Professor, Department
of Computer Science and
Engineering,
NIT, Warangal



Dr. Mohan Kumar Kesarla
SCIENTIST A, Instituto de Ciencias
Físicas ICF, UNAM



Dr. Bikramaditya Das
Associate Professor,
Department of Electronics and
Communication Engineering,
CUPGS, BPUT, Rourkela

Expert Details



Prof. Sarat Kumar Swain
Professor, Department of
Chemistry, VSSUT, Burla



Dr. Chandrakanta Sahoo
Associate Professor, IMIT,
Cuttack



Dr. Soumendra Patra
MBA Department, Ravenshaw
University