

**NAGALAND UNIVERSITY**  
**DEPARTMENT OF EDUCATION, KOHIMA CAMPUS, MERIEMA-797004**

**Coursework Ph.D. Programme in Education (Syllabus for Coursework)**

The Ph.D. Coursework in Education will comprise of four papers. The four papers will be completed in one semester (6 months).

Course Code	Name of the Course Paper	No. of Credits	Internal Evaluation	External evaluation	Total Marks
<b>PHD/EDU 101</b>	Methodology of Educational Research	4	30	70	100
<b>PHD/EDU 102</b>	Statistics in Educational Research	4	30	70	100
<b>PHD/EDU 103</b>	Education, Research and Publication Ethics	4	30	70	100
<b>PHD/EDU 104</b>	Area Study in Educational Research	4	30	70	100
<b>Total</b>		<b>16</b>	<b>120</b>	<b>280</b>	<b>400</b>

**Course Objectives:**

The course work for admission to Ph.D. registration in Education will enable the scholars to acquire-

- i) The knowledge and awareness about the concept of research and the latest methods and approaches to conduct research.
- ii) To strengthen the knowledge of scholars of sampling methods, hypothesis and research tools and psychological tests to collect suitable data for their research from both the primary and secondary sources.
- iii) Empower the scholars with computer applications in research particularly in the use of EXCEL Power Point and SPSS.
- iv) Provide information and trends of research in Education in the State and Offer practical knowledge of area studies and the different research agencies in the field of Education.
- v) Empower the scholars to prepare research proposals in the concerned area of their interest and specialization.

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**Ph.D. Programme in Education**

## **PHD/EDU 101: Methodology of Educational Research**

**(4 credits)**

### **Unit- I: Introduction to Research**

- Concept and nature of Educational Research
- Types of Research: Historical, Experimental, Survey and descriptive research
- Criteria of good research

### **Unit-II: Review of Related Literature**

- Need and Importance of review of related literature
- Different sources of review
- Bibliography/reference styles

### **Unit-III: Variables, Hypotheses and Sampling**

- Variables and Types of Variables in Research
- Formulation of research objectives and Research Questions
- Formulation of Hypotheses and Testing of Hypotheses
- Population & Sampling

### **Unit-IV: Data Collection & Reporting**

- Research Tools & Types- Observation Schedule, Interview, Questionnaire, etc
- Development and Standardisation of Research Tools
- Data Analysis & Research Reporting
- American Psychological Association (APA) Reference Style

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**Ph.D. Programme in Education- Syllabus for Course Work**

**PHD/EDU 102: Statistics in Educational Research** **(4 credits)**

**Objectives:** On completion of this course, the scholars will be able to

1. Familiarize about data types & their nature in educational research
2. Do the needful statistical analysis for the development and standardization of research tools.
3. Select an appropriate statistical technique for analyzing quantitative data/different types of hypotheses & use different software.
4. Use various methods to analyze qualitative data in educational research.

**Unit-1: Data in Educational Research**

- Data-Concept, types, nature
- Scales of measurement
- Data collection-AI-driven data collection tools, sources, procedure and organization of data
- Triangulation, normality, outliers

**Unit-2: Data analysis for tool development & Standardisation**

- Item analysis (scale & test)
- Determining reliability, validity & norms for research devices
- Exploratory Factor Analysis (EFA)
- Confirmatory Factor Analysis (CFA)

**Unit-3: Qualitative Data Analysis and interpretation of results**

- Frequency & percentage analysis
- Content analysis
- SWOT analysis
- Thematic analysis
- AI Tools for Qualitative Data Analysis and Implications

**Unit-4: Quantitative Data Analysis and interpretation of results**

- Differential analysis, Factorial ANOVA/MANOVA
- Co-variance analysis (ANCOVA, MANCOVA)
- Correlational, Mediation, Prediction and Path analysis
- Non-parametric tests (Mann-Whitney U-test, Chi-square test & Kruskal Wallis test etc)
- AI Tools for Quantitative Data Analysis and Implications

- **Learning Activities:** Preparation of research tools, internet as a source for research, use of MS excels, SPSS, Nvivo, Seminar Presentation (PPT), Reflective written assignments etc.

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**PHD/EDU 103: Education, Research and Publication Ethics (4 credits)**

**Unit –I: Research in Education: An Overview**

- Status & trends of Research in the State
- Problems and issues related to research in education
- Issues and concerns in Education-Elementary Education in relation to Communitization, HIV AIDS, IDU, Juvenile delinquency, Women empowerment.
- Perspectives of NEP 2020 in higher education and research

**Unit-II: Scientific Conduct**

- Ethics in Educational Research: Intellectual Honesty and Research Integrity
- Scientific misconducts- falsification, fabrication, and plagiarism (FFP),
- Selective reporting and misrepresentation of Data
- Redundant Publications: Duplicate and overlapping publications, salami slicing

**Unit –III: Publication Ethics**

- Scientific steps in the publication of manuscripts
- Publication Ethics- concept and importance; violation, authorship and contributorship
- Publication Misconduct- concept, unethical behaviour, types of misconduct, identification
- Predatory publishers and Journals
- Artificial Intelligence and Academic Integrity

**Unit –IV: Practical Activities**

- Reference Management System (RMS)
- Open access publications and initiatives
- Publication Misconduct: Group Discussion on relevant topic; Paper Presentation on relevant topic; Checking for plagiarism using software tools like Turnitin/Urkund/iThenticate, Drillbit, etc.

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**PhD/EDU 104: Area Study in Educational Research**

**(4 credits)**

The PhD-EDU 104: Area Study in Educational Research (4 credits), is a four-unit paper that explores theory, significant practices, and application in a specific educational research area. The course is assessed through equal weightage of four units, with 30% internal evaluation and 70% end-term examination. The PhD scholar in consultation with his/her supervisor will have to design the syllabus for this paper and submit the same to the DRC/RAC for its approval within one month. The internal examination which will be taken care of by the respective supervisors in consultation with the PhD programme coordinator, includes assignments, fieldwork, and seminar presentations etc. evaluating the scholar's ability to apply theoretical concepts to their research area. While end term examination based on their area study syllabus and presentation of research proposal as per the NU guidelines.

**Objectives:**

1. To identify essential research areas, indexed databases, and gaps to comprehend the research context thoroughly for better understanding the area to be investigated.
3. To apply appropriate theoretical and conceptual frameworks, create and test theoretical/research models to guide research design, methodology, and analysis.
4. To refine research writing skills, cultivate advanced research skills (critical thinking, analysis, problem-solving), and craft a persuasive research proposal.

**Suggested Areas of Study:** Comparative Education; Cultural Studies; Curriculum Studies; Cognitive Psychology; Distance Education; Early Childhood Care and Education; Educational Leadership and Management; Educational Policies and Schemes; Educational Technology; Elementary/Secondary/Hr. Secondary/Collegiate/Higher Education; Entrepreneurship Education; Environmental Education; Gender Studies; ICT and e-learning; Inclusive Education; Indigenous Education; Language & Literacy Education; Life Skills Education; Mathematics Education; Philosophy of Education; Population Education; Psychology of Education; Science Education; Sociology of Education; Special Education; Teacher Education and Professional Development; Values and Human Rights Education; Vocational Education, etc. *{These areas are not exhaustive, and PhD scholars can explore inter/multi-disciplinary and innovative research topics that combine multiple areas}.*

**Suggested Activities:** Preparation and presentation of Synopsis/Research Proposal; Familiar with various referencing styles (APA, MLA, IEEE etc.); writing a review-based paper by using content or meta-analysis; designing concept maps and conceptual/research models etc.

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