# ACADEMIC AFFAIRS OFFICE INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

No. Acd./ 1266 /IAPC-76

Dated: December 09, 2019

#### Head, Department of Management Studies

(through e-mail)

The IAPC in its 76<sup>th</sup> meeting held on 07.11.2019 vide **Item No. 76.2.7** considered the proposal of Department of Management Studies to introduce a new Pre-PhD Course i.e., BMN-901: Research Methodology.

The IAPC recommended the proposal with minor modifications. Duly modified and approved syllabus is placed as **Appendix- A** on Channel I/ Academic webpage of iitr.ac.in.

Assistant Registrar (Curriculum)

Encl: as above

### Copy to (through e mail):-

- 1. All faculty
- 2. All Heads of Departments/ Centres
- 3. Dean. Academic Affairs
- 4. Associate Dean of Academic Affairs(Curriculum)
- 5. Channel I/ Academic webpage of iitr.ac.in

#### INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPTT. / CENTRE : DEPARTMENT OF MANAGEMENT STUDIES

1. Subject Code: BMN-901 Course Title: Research Methodology

2. Contact Hours: L: 3 T: 0 P: 0

3. Examination Duration (Hrs.): Theory: 3 Practical: 0

4. Relative Weightage: CWS: 20-35 PRS: 0 MTE: 20-30 ETE: 40-50 PRE: 0

**5.** Credits: 3 **6.** Semester: Both

7. Pre-requisite: Nil 8. Subject Area: PEC

**9. Objective:** The course is designed to provide in-depth knowledge of research methodology in all fields of management and other disciplines.

#### 10. Details of the Course:

Sl.	Contents	Contact
No		Hours
1	Foundation of Research: What is Research, Objectives of Research, Scientific	2
2	Research, Research and Theory, Conceptual and Theoretical Models. <b>Types and Methods of Research:</b> Descriptive vs. Analytical, Applied vs.	3
2	Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical, concept of	3
	applied and basic research process, criteria of good research.	
3	Review of Literature: Importance of literature review in defining a problem,	2
	literature review-primary and secondary sources, reviews, monograph, patents,	
	research databases, web as a source, searching the web, critical literature review,	
	identifying gap areas from literature and research database, development of	
	working hypothesis	
4	Planning of Research: The planning Process, Selection of a Problem for	2
	Research, Formulation of the Selected Problems, Hypothesis Formation,	
	Measurement, Research Design/Plan.	
5	Sampling: Sampling Techniques or Methods, Choice of Sampling Techniques,	3
	Sample Size, Sampling and Non-Sampling Errors.	
6	Methods and Tools of data collection: Meaning and Importance of Data,	3
	Sources of Data, Use of Secondary Data, Methods of Collecting Primary Data,	
	Observation Method, Experimentation, Simulation, Interviewing, Panel Method,	
	Mail Survey, Projective Technique, Sociometry. Types of Data, Construction of	
	Schedules and Questionnaires, Measurement of Scales and Indices, Pilot Studies	
<u> </u>	and Pre-tests	
7	Field work: The Nature of Field Work, Selection and Training of Investigators,	3
	Sampling Frame and Sample Selection, Field Operation, Field Administration,	
	Editing, Classification and Coding, Transcription, Tabulation, Introduction to	
	Statistical Softwares	
8	Qualitative Research: Theorizing from qualitative data • Approaches to	6
	qualitative research • Case study research • Collecting information • Triangulation	
	of different data sources • Analyzing data and coding • Moving from data analysis	
	to theoretical development • Presenting the results • Tables and figures: Visual	

	aids in qualitative data analysis • Developing process models • Ethnographies and	
	observation • Grounded theory • Mixed-methods research	
9	Qualitative Research Process: Ontological and epistemological assumptions of	5
	qualitative research b) Consistency between research questions and methods	
	adopted c) Selecting a qualitative research method d) Designing qualitative	
	research: site selection, sampling, and data collection e) Data analysis: Case	
	analysis, cross-case comparison, coding procedures	
10	Analysis of Data: Hypothesis Testing, Correlation and Regression, Discriminant	8
	and Logit Analysis, Factor Analysis, Cluster Analysis, Multidimensional	
	Scaling and Conjoint Analysis, Structural Equation Modeling and Path Analysis,	
11	<b>Report writing:</b> Types of Reports, Planning of Report Writing, Research Report	2
	Format, Principles of Writing, Documentation, Writing of Report, Briefing.	
12	RESEARCH ETHICS, IPR AND SCHOLARY PUBLISHING: Ethics-	3
	ethical issues, ethical committees (human & animal); IPR- intellectual property	
	rights and patent law, commercialization, copy right, royalty, trade related aspects	
	of intellectual property rights (TRIPS); scholarly publishing- IMRAD concept and	
	design of research paper, citation and acknowledgement, plagiarism,	
	reproducibility and accountability	
	Total	42

## 11. Suggested Books:

S.	Name of Authors/Book/Publisher	Year of
No.		Publication /
		Reprint
1	Business Research Methods by Donald R Cooper and Palmela Schinder.	2013
	McGraw Hill.	
2	Advanced Research Methodology by R. Barker Bausell. Scarecrow Press	2013
3	Research Methodology: An Introduction by Wayne Goddard, Stuart	2007
	Melville. Juta and Co. Ltd.	
4	Research Methodology: A Guide for Researchers in Management and	2006
	Social Sciences by Bill Taylor, Gautam Sinha, Taposh Ghoshal. Prentice-Hall	
	of India Private Limited, New Delhi.	
5	The Essence of Research Methodology by Jonker, Jan, Pennink, Bartjan.	2010
	Springer.	
6	Research design: Qualitative, quantitative, and mixed methods approaches	2012
	by Creswell, J. (4th ed.) Thousand Oaks, CA: Sage	
7	Qualitative data analysis: A methods sourcebook – Third edition by Miles,	2014
	M.B., Huberman, A.M. & Saldana, J.; Thousand Oaks, CA: Sage.	