

AC: 01/09/2018

Item No.11



Rayat Shikshan Sanstha's
KARMAVEER BHAURAO PATIL COLLEGE, VASHI
(Autonomous College)

Revised Syllabus for Ph.D. Course Work

(As per Credit Based Semester and Grading System with effect from the academic year 2018–2019)



Gayah
I/O PRINCIPAL
KARMAVEER BHAURAO PATIL COLLEGE
VASHI, NAWANUMBANI 400708

Course Work Structure for Phd Program in Faculty of Arts, commerce and Science

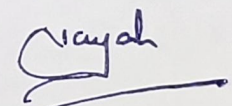
(With effect from Academic Year 2018-19)

CODE	NAME OF COURSE	CONTACT HOURS	CREDITS	EXAMINATION SCHEME				
				MID TERM TEST	END SEMES TER EXAM	TERM WORK	SEMINAR PRESENT ATION	TOTAL
Phd101	Research Methodology	6	6	20	80	--	--	100
Phd102	Course suggested by Guide*	6	6	20	80	--	--	100
Phd103	Seminar	-	4	-	-	50	50	100
Total		12	16	40	160	50	50	300

Grading of Research Candidates Performance

Awarding of grades to research candidates based on their performance shall be done as per the applicable ordinances and regulations for undergraduate and Post graduate programs of Engineering under the Faculty of Technology. Semester Grade Point Index (SGPI) shall be also calculated based on the ordinances and regulations applicable for engineering programs under Faculty of Technology. Approved and recognized Research Centers shall prepare Phd course work grade card after successful completion of course work and issue to candidates and one copy to University concerned section for record.




 T/C PRINCIPAL
 KARMAVEER BHAURAO PATIL COLLEGE
 VASHI, NAVI MUMBAI 400 703.

Course Code	Course Name	Credits
PhdC101	Research Methodology	06

Module	Detailed content	Hrs.
1	Definition and Characteristics of Research: Research – Definition; Concept of Construct, Postulate, Proposition, Thesis, Hypothesis, Law, Principle. Philosophy and validity of research. Objective of research. Various functions that describe characteristics of research such as systematic, valid, verifiable, empirical and critical approach.	8
2	Types of Research: Pure and applied research. Descriptive and explanatory research. Qualitative and quantitative approaches. Formulating the Research Problem, Literature Review, Developing the objectives, Preparing the research design including sample Design, Sample size.	10
3	Outcome of Research: Relevance, interest, available data, choice of data, Analysis of data, Generalization and interpretation of analysis, Preparation of the Report on conclusions reached, Testing validity of research outcomes, Suggestions and recommendations, identifying future scope.	10
4	Research Ethics in research: human dignity and reliability, transparency and honesty towards research areas, individual freedom in relevant research, protection individual by research, confidentiality and privacy, promotion of impartiality and comprehensiveness, minimize harm and maximum benefit, benefit of research for betterment of society, respect and protect an environment for future, check personal rights of the participants (every living and non-living entities), penalties researcher if he or she violates personal rights of the participants, scrutinize research proposals that methodologies involving human participation, issues relating to copyright of data and other materials used in the research, plagiarism policy, strong justification when some controversial methodologies like covert research, internet research, social media research	14
5	Correlation and Regression Analysis: Karl Pearson's and Rank Correlation coefficient, simple linear regression: least squares method, Linear Programming: Graphical solution, simplex method, dual, sensitivity analysis, transportation and assignment problems.	10
6	Management Decision Making & Computer Applications: System approach, decision making under uncertainty and risk: decision tables and decision tree. Statistical data analysis: generating charts/ graph and other features. Introduction to tools: Tools used may be Microsoft Excel, Open office, Microsoft Power Point or similar tools.	8

References:

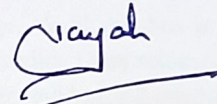
1. Dawson, Catherine, 2002, *Practical Research Methods*, New Delhi, UBS Publishers' Distributors.
2. Kothari, C.R., 1985, *Research Methodology-Methods and Techniques*, New Delhi, Wiley Eastern Limited.
3. Kumar, Ranjit, 2005, *Research Methodology-A Step-by-Step Guide for Beginners*,



PRINCIPAL
KARMAVEER BHAURAO PATIL COLLEGE
VASHI, NAVI MUMBAI 400 703.

(2nd.ed), Singapore, Pearson Education.

4. *Shrivastava, Shenoy & Sharma, Quantitative Techniques for Managerial Decisions, Wiley*
5. Goode W J & Hatt P K, *Methods in social research, McGraw Hill*
6. *Basic Computer Science and Communication Engineering – R. Rajaram (SCITECH)*



I/C PRINCIPAL

KARMAVEER BHAURAO PATIL COLLEGE
VASHI, NAVI MUMBAI 400 703.



Course Code	Course Name	Credits
PhdC102	Course suggested by Guide*	06

This course is to be suggested by guide/supervisor in specific domain area of research undertaken by the research candidate.

Research candidates can undertake this course in consultation with guide/supervisor as per guidelines given below;

1. Relevant course shall be successfully completed in IIT Bombay which has 6 credits.

OR

1. Relevant PG course in the research domain area of research candidate at any PG center affiliated to University of Mumbai.

In this case, PG course as per Karmaveer Bhaurao Patil College, Vashi syllabus is of 4 credits. Thus additional work needs to be done for remaining 2 credits. (Any relevant PG course suggested by guide 4 credits + additional work suggested by guide for 2 credits).

Additional work may be in line with any of the following guidelines:

- i. Minimum four assignment problems from same domain area

OR

- ii. Any relevant PG Laboratory course, as per University of Mumbai PG syllabus, suggested by guide

OR

- iii. One course project from same domain area

OR

- iv. One simulation based project in the domain area using relevant software tool.



Gayatri

I/C PRINCIPAL
KARMAVEER BHURAO PATIL COLLEGE
 VASHI, NAVI MUMBAI 400 703.