

CURRICULUM

POSTGRADUATE DIPLOMA IN RESEARCH METHODS AND ALLIED ASPECTS

GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY

**(MEMBER OF THE ASSOCIATION OF COMMONWEALTH UNIVERSITIES
AND INTERNATIONAL ASSOCIATION OF UNIVERSITIES)**

General Sir John Kotelawala Defence University (KDU) is the pioneer and most prestigious Degree awarding Defence University in Sri Lanka, established under the Sir John Kotelawala Defence Academy Act No:68 of 1981 and subsequent amendments.

Postgraduate Diploma in Research Methods and Allied Aspects

Introduction

1. Research is an integral part of development in a country. In view of this the government of Sri Lanka has also recently promoted research in all sectors especially in academia and research institutes by introducing a remuneration mechanism for researchers. Nowadays, knowledge of research is treated as value addition for the professions such as managers and administrators. This is because although managers and administrators may not do the research themselves, they still need to communicate with researchers and comprehend the kind of research required for the development of their organizations. Despite the need for and value of conducting research, graduates are not motivated or properly oriented to do research. Undisputedly, there is a need for training of novice researchers in the conduct of research. Such training programmes are mostly limited to teaching of research methodologies, and neglect the allied aspects such as management of research projects, legal & ethical aspects of research, commercializing research, philosophy of research and scientific communications. Many research methodology courses are confined to statistical techniques and do not exploit the power of modern intelligent techniques such as artificial neural networks, genetic algorithms, decision trees, fuzzy logic and computer simulations.

2. In view of the above, General Sir John Kotelawala Defence University has recognized the need for offering the first ever comprehensive postgraduate programme covering a wider spectrum of allied aspects in research. The programme is named as **Postgraduate Diploma in Research Methods and Allied Aspects**. This will be a one year part time programme covering 35 credits comprising 29 credits of course work and a 6 credit worth research project.

Objectives

3. Main objectives of introducing the **Postgraduate Diploma in Research Methods and Allied Aspects** are as follows:

- a. To encourage graduates to be involved in research and to contribute Sri Lanka to reach greater heights in research and development in the global arena.
- b. To educate novice researchers in research methodologies and allied aspects thereby producing high-quality and versatile researchers.
- c. To introduce the state-of-the-art techniques including intelligent techniques and computer simulations for conduct of research in more practical and cost effective manner.

- d. To provide hands on experience in conduct of a research project prior to embarking on reading for a research degree (MPhil/PhD)
- e. To enable the emergence of professional researchers and various types of research institutes in public and private sector.
- f. To educate administrators and managers about research thereby promoting organizational research and developments

Intended Learning Outcomes

- 4. On successful completion of this Postgraduate Diploma, students will be able to:
 - a. Identify different types of research and the research methodologies adopted in different subject areas
 - b. Critically analyze research methodologies and select and apply chosen research methods for the own area of research
 - c. Use statistical techniques, intelligent techniques, computing and simulations for modelling and analysis of research data
 - d. Produce various scientific documents such as research proposals, interim reports, papers for conferences/journals and theses.
 - e. Apply knowledge in allied aspects of research including planning, budgeting, managing, team building and commercialization of research in ethical/social contexts.
 - f. Demonstrate out of the box thinking about discovering of knowledge, invention of artifacts and understanding of philosophy of research

Programme Structure

- 5. The Postgraduate Diploma in Research Methods and Allied Aspects is a one year part time programme comprising a total of 35 credits. Course work of the programme is of 29 credits whereas 6 credits have been allocated for a research project. A course module is worth of 2 or 3 credits.
- 6. Candidates have to offer 12 compulsory course modules comprising 27 credits and 1 elective module comprising 2 credits. Annex A shows the curriculum of the proposed PG Diploma in Research Methods and Allied Aspects.

Course Delivery Plan

7. Course delivery plan of each semester is attached hereto as Annex B. Identified panel of resource persons are shown in Appendix C.

Eligibility Criteria

8. A person is eligible for admission to the programme of study leading to the Postgraduate Diploma in Research Methods and Allied Aspects provided he/she meets one of the following conditions:

- a. He/ She is a Commissioned Officer of the rank of Captain/ Lieutenant/ Flight Lieutenant or above, with a minimum of five (05) years of Commissioned Service.
- b. He/ She is a Police Officer in the rank of ASP/ CI/ IP with a minimum of ten (10) years service in the Department of Police.
- c. He/she is a graduate with a three or four year degree in any discipline from a recognised university.
- d. He/she is a person with a professional qualification equivalent to a three year or four year degree as decided by the BOM.

How to apply

9. A person who wishes to be a candidate of the Postgraduate Diploma in Research Methods and Allied Aspects shall make an application to the respective Service Commander/ Inspector General or Police/ Head of Department who will submit these applications to the Registrar, KDU with their recommendations. All applicants will be required to pass an aptitude test conducted by KDU.

10. For further details, contact Brigadier NK Wadugodapitiya, Dean – Faculty of Graduate Studies, KDU, Tel 112632419

Programme Fees

Course	:-	Rs 72,000.00 (Rs. 50,000.00 for the Academia
Registration Fess	:-	Rs 3,000.00 of State Universities)
Library Fees	:-	Rs 2,000.00
Refundable Library Deposit	:-	Rs 4,000.00
Refundable Mess Deposit	:-	Rs 2,000.00

Closing date for the application : 15th December 2013

Commencement Date of the programme : 1st week of January 2014

Curriculum for
Postgraduate Diploma in Research Methods and Allied Aspects

Module	Credits	Elective/Compulsory
Information Technology for Researchers	2	C
Essentials of Communication skills	2	C
Scientific Communications	3	C
Essentials of Philosophy for Research	2	C
Statistical Techniques in Research	3	C
Intelligent Techniques for Research	2	C
Research Project Management	2	C
Legal Aspects of Research	2	C
Social and Ethical Aspects of Research	2	C
Commercialization of Research	2	C
Team Building and Leadership skills	2	C
Introduction to Research Methodologies	3	C
Research Methodologies in Science and Engineering	2	E
Research Methodologies in Medicine	2	E
Research Methodologies in Law	2	E
Research Methodologies in Management	2	E
Research Methodologies in Social Sciences	2	E
Project (Report, Research Paper, Presentation)	6	C

Course delivery plan of
Postgraduate Diploma in Research Methods and Allied Aspects

CODE	SUBJECTS	LECTURE HOURS	ASSIGNMENTS	CREDITS
	<u>Semester I</u>			
PDRM 1012	Information Technology for Researchers	15	45	2
PDRM 1022	Essentials of Communication Skills	15	45	2
PDRM 1032	Team Building & Leadership Skills	15	45	2
PDRM 1042	Research Project Management	15	45	2
PDRM 1053	Scientific Communication	30	45	3
PDRM 1063	Introduction to Research Methodologies	30	45	3
PDRM 1073	Statistical Techniques for Research	30	45	3
	<u>Semester II</u>			
PDRM 2082	Essential of Philosophy for Research	15	45	2
PDRM 2092	Legal Aspects of Research	15	45	2
PDRM 2102	Social & Ethical Aspects of Research	15	45	2
PDRM 2112	Commercialization of Research	15	45	2
PDRM 2122	Intelligent Techniques for Research	15	45	2
	<u>Elective</u>			
PDRM 2132	Research Methodologies in Science & Engineering	15	45	2
PDRM 2142	Research Methodologies in Medicine	15	45	2
PDRM 2152	Research Methodologies in Law	15	45	2
PDRM 2162	Research Methodologies in Management	15	45	2
PDRM 2172	Research Methodologies in Social Sciences	15	45	2
PDRM 3000	Project			6
	Total			35

Annex C

Resource Persons for Programme design and delivery

Postgraduate Diploma in Research Methods and Allied Aspects

Module	Crdt	Elective/ Compulsory	Resource Person
Information Technology for Researchers	2	C	AK
Essentials of Communication skills	2	C	KA
Scientific Communications	3	C	AK
Essentials of Philosophy for Research	2	C	LNK
Statistical Techniques in Research	3	C	SB
Intelligent Techniques for Research	2	C	AK
Research Project Management	2	C	KH
Legal Aspects of Research	2	C	PM
Social and Ethical Aspects of Research	2	C	LB
Commercialization of Research	2	C	MMJ
Team Building and Leadership skills	2	C	KH
Introduction to Research Methodologies	3	C	AK
Research Methodologies in Science and Engineering	2	E	SRM
Research Methodologies in Medicine	2	E	RF
Research Methodologies in Law	2	E	PM
Research Methodologies in Management	2	E	WB
Research Methodologies in Social Sciences	2	E	SID
Project (Report, Research Paper, Presentation)	6	C	

Legend

AK - Prof. Asoka Karunananda	LB - Dr. Lal Balasuriya
WB - Prof. Weerakoon Banda	KA - Mr. Kithsiri Amarathunga
SID - Prof. KAP Siddisena	LNK – Prof. LNK De Silva
MMJ -Dr - MM Jayawardena	SM – Prof Susirith Mendis
PM - Dr. Prathiba Mahanamahewa	SB- Dr. Sarath Bannayake
SRM – Prof. S. R. Munasighe	