



**Master of
Philosophy
(M.Phil.)
in
Health Economics**

Student Prospectus

For Academic Year

2015-2017

Department of Health Economics

**Pakistan Institute of Development
Economics**

PIDE VISION

PIDE to Function as a World Class Centre of Excellence
For Research and Teaching

PIDE MISSION

A world-class research and teaching institute building on the
strengths and high standards it has achieved over the last fifty
eight years

PIDE MOTTO

“Spirit of Free Inquiry”

Welcome Message by the Head, Department of Health Economics

It gives me great pleasure to welcome you at PIDE.

PIDE, established in 1957, is the epic, premier and internationally renowned school of research and learning in economics. It hosts academic programmes with world class standard quality education, foreign qualified faculty and state of the art studying environment, all at an affordable cost. Department of Health Economics is associated with the Centre for Population, Health and Social Policy (CPHSP) and seated at Pakistan Institute of Development Economics (PIDE).

M.Phil. Health Economics is one of the major programmes being offered at PIDE. Health Economics deals with the relationship between health of individuals and the resources needed to sustain and improve it. The question of fulfilling infinite requirements (here the need for health, nutrition, environment etc.) with limited resources (materials, time, money, human etc.) in the best (choosing the best among alternatives-efficiency) of manners brings in the economics to health discipline, thus making Health Economics a vibrant and policy-centric subject for learning.

Health Economists would be involved in setting out the priorities for allocation in different health interventions and evaluating the success of these interventions for an informed policy making. Public health decision makers make choices among the alternatives, intervention-prevention and others, basing their decision besides using other variables on the cost-effectiveness of each of these interventions. This is more important for countries/individuals with fewer resources.

This makes Health economics a rapidly developing field with high importance worldwide and in Pakistan. PIDE's M.Phil. Health Economics programme introduces students to the ways in which economic principles and concepts can be applied to the analysis of decisions by consumers, firms and governments regarding health and healthcare.

Dr. Mahmood Khalid

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1. Introduction

1.1 Pakistan Institute of Development Economics

Pakistan Institute of Development Economics (PIDE) is a premier school of learning in economics established as an autonomous research organization by the Government of Pakistan. It is devoted to theoretical and empirical research in Development Economics in general and on Pakistan-related economic issues in particular. In addition to providing a firm academic basis to economic policy-making, its research also provides a window through which the outside world can view the nature and direction of economic research in Pakistan. Other social sciences, such as demography and anthropology, and interdisciplinary studies increasingly define the widening scope of research that must be undertaken for proper economic policy formulation and for development to have sound underpinnings. Over the past 58 years PIDE has earned an international reputation and recognition for its research. In November 2006 the Institute was granted the degree awarding status. The priority of the academic programmes is to provide quality education which is affordable but of world class standard.

1.2 Centre for Population, Health and Social Policy

A centre of excellence named Centre for Population, Health and Social Policy (CPHSP) was established at PIDE in 2012 with the prime objective of focusing on health holistically and health economics specifically. The Centre aims to carry out its objectives through research and teaching.

1.2.1 Research at CPHSP

The Centre carries out policy oriented research in the field of health through a multidisciplinary lens, mainly that of economics and demography. Some of the areas of interests for the Centre include: supply and demand for health; production of health; costs of health care; government intervention in health care markets; health insurance; cost Benefit Analysis (CBA), cost Effectiveness Analysis (CEA), Cost Utility Analysis

(CUA), and public-private partnership in health service delivery.

1.2.2 Research Dissemination

Proper utilization of research is not possible without effective dissemination especially among the stakeholders. Through seminars, conferences and workshops, and working papers the CPHSP disseminates the research conducted at the Centre. These seminars are proposed to be conducted in different cities of the country in future so as to include professionals and experts from all over Pakistan in the process. The PIDE publication house also helps disseminate the research conducted by the centre far and wide. The in-house publisher is credited by publishing world's longest running Development Economics journal, the Pakistan Development Review (PDR) for the last fifty years, along with publishing Institute's reports, working papers and mimeographs.

1.2.3 Academics at CPHSP

The CPHSP has three academic clusters, namely:

1. Population cluster
2. Health Economics cluster
3. Social Policy cluster

The **Health Economics cluster** builds on the existing strength in Economics at PIDE. Due to availability of senior faculty members from leading universities of the world and the addition of adjunct faculty members from renowned international universities, CPHSP initiated **Master of Philosophy in Health Economics**. The programme aims to produce professionals well-versed in the application of economics to health and healthcare. Initially an M. Phil. degree is being offered with plans to initiate a PhD in the field at a later time.

1.2.4 Short Courses at CPHSP

Along with the above mentioned degree programmes, conducting short courses on the

above three clusters are also part of the CPHSP agenda, especially for the Health Economics cluster. Given the need to fulfill the dearth of economic understanding of health and healthcare issues such courses can help get expertise for those who cannot enroll for the whole duration of the degree programme.

1.2.5 Vision of CPHSP

The CPHSP aspires to be the Centre of Excellence for health economics and related disciplines through quality teaching, research and policy advice.

1.2.6 Mission of CPHSP

Building on the strengths and high standards achieved over the last fifty eight years by PIDE, the CPHSP commits to provide excellence in teaching and research through:

- a. Development of research programmes directed to the understanding of problems and creation of knowledge important to provide inputs for population, health and social policies responding to the national needs.
- b. Building an environment where the faculty has a passion for teaching and imparting knowledge.
- c. Providing students with the knowledge, skills and experience that lead to personal development and an ability to apply their skills to meet the changing needs of the society.
- d. Close collaborations with the national and international education facilities to broaden the academic and research perspectives and adding a global context.
- e. Reaching out to an expanded audience of learners, practitioners and policy makers through residential, distance learning and short duration education programmes as well as dissemination events utilizing a variety of learning media and technologies.
- f. Playing a leading role in country's health planning and development process.

1.2.7 Objectives of CPHSP

- a. To discover, integrate and disseminate knowledge through research in the field of health especially with demography and economics lens.
- b. To produce professionals with the right mix of knowledge, skills and competence in health economics and related disciplines.
- c. Articulate and translate the knowledge generated into evidence based population, health and social policies and practices.

1.2.8 Core Values of CPHSP

- Freedom of inquiry
- Transparency
- Respect for diversity
- A culture of lifelong learning
- Personal and organizational integrity

1.2.9 Motto of CPHSP

Inquire, teach and serve to improve health status of people.

2. Master of Philosophy (M.Phil.) in Health Economics

Health economics is a rapidly developing field which has acquired much importance among the public health practitioners, governments, physicians, and pharmaceutical industry worldwide but it remains a very neglected area in Pakistan. There is a pressing need to develop the discipline in the country and train professionals who can deal with these issues skillfully. Health economics offers considerable flexibility and diversity in the application of economic tools to health and healthcare, which can help in better comprehension and planning of related issues. In the context of deteriorating public health system in Pakistan, the discipline of economics is critically important for measuring health impact of diseases and interventions; evaluating the cause-effect relationships between care-seeking behaviour and the specific attributes of individuals and health systems; estimating the statistical association between patient compliance and personal as well as intervention-specific attributes. In Health economics one can also: measure inefficiency in resource use by governments or individual health institutions; guide the choices in public health interventions; assess the macroeconomic relationship between disease, development, poverty, and globalisation; and assess health systems' performance and advise governments and policy makers accordingly. Considering the importance of Health Economics field and its global applicability, the Department of Health Economics was established in 2012 and has close association with the CPHSP.

2.1 Why Pursue M.Phil. in Health Economics at PIDE?

Being the seat of economics in Pakistan, PIDE's M. Phil. Health Economics programme is designed to introduce students to the ways in which economic principles and concepts can be applied to the analysis of decisions by consumers, firms and governments regarding health and healthcare. The programme provides training in all aspects of health economics, meeting the dire need for comprehensive programme in Pakistan. Clearly defined academic streams ensure all students have the necessary skills and knowledge to succeed in this programme regardless of the previous economics background. This highly specialized programme provides critical insight into the complex economic issues in health sector administration, and the economic impacts of health decisions.

The M.phil. Health Economics programme is designed to provide first-class training in the theoretical foundations and practical applications of health economic methods for decision-making and policy development in health and health care, within the context of ethical principles of society. The programme will provide students with the experience and skills necessary to participate in health services decision-making through training in health systems and the economic principles that guide their organization and function. The foundation for specialisation in health economics is provided through course work in the major areas of health economics, specifically Economic Theory, Statistics and Econometrics, Economic Evaluation Methods, Issues in Public Health, Healthcare Financing and Health Insurance, Health Policy and Planning, Healthcare Organisation, Analysis and Management, Pharmaceutical Economics, and Modelling in Health Economics.

Students will gain an understanding of the key analytical arguments that are used in health economics and their normative foundations and ethical implications. The students are trained to measure health impact of diseases and interventions; evaluating the cause-effect relationships between care-seeking behaviour and the specific attributes of individuals and health systems; estimating the statistical association between patient compliance and personal as well as intervention specific attributes, inefficient resource use by governments or individual health institutions; guide the choices in public health interventions; assess the macroeconomic relationship between disease, development, poverty, and globalisation; and assess health systems' performance and advise governments and policy makers accordingly.

Further, they will acquire extensive knowledge of the nature and sources of socio-economic data, current challenges and major areas of research, and the role of observation, abstraction, and model construction to facilitate empirical evaluation.

2.2 Vision, Mission, Goals and Objectives of the M.Phil. Health Economics Programme

2.2.1 Programme Vision

To produce health economists, well-versed in the application of economic tools to health and healthcare issues.

2.2.2 Programme Mission

To produce highly skilled health economists who have frontier level understanding in theoretical foundations and practical training of applications for health economic methods in decision-making and policy development for health and health care.

2.2.3 Programme Goals

- To strengthen local capacity to learn to apply economic principles and techniques for the analyses of issues in the health sector policy and management
- To understand nature and implications of health economics and management.
- To improve the decision making process in the health sector.
- To prepare a pool of health economists and health managers in the country for an improved health and health care system.

2.2.4 Programme Objectives

- To enhance knowledge and skills in applying appropriate tools of economic analysis in the study and evaluation of inputs, processes and outcomes of health care and health care systems.
- To acquaint students with the economic logic and reasoning behind health sector policy and health system reforms.
- To equip students with the necessary techniques for evaluating the organisation and financing of health care systems.
- To build capacity in the decision making process in the health sector.

The graduates of the M.Phil. Health Economics programme will be prepared to:

- Take on leadership roles in health economic planning, management and decision

making.

- Solve health system problems through the application of economic techniques
- Manage and economize resources for health for attaining efficiency, equity and sustainability.
- Make health economic policy decisions based on evidence.
- Analyze health economic policy alternatives, balancing economic, financial and socioeconomic imperatives.
- Demonstrate the knowledge of economics, justify the use of economic analysis in health care, and incorporate health economic analysis in their work.
- Evaluate different economic approaches to priority setting in health care.
- Appraise the role of effective health care finance and delivery.
- Communicate and advocate the role of health economic policies effectively.

2.3 Scope of M.Phil. Health Economics Degree

The programme offers the students an opportunity to develop strong analytical skills and is a qualification which may further their career opportunities in national and international health organisations both in public and private sectors. Graduates can go on to work in government departments, research units, universities, national health services and health care organisations, and pharmaceutical industry. Last but not the least our graduates can pursue PhD in Health Economics in foreign universities.

2.4 The M.Phil. Health Economics Programme Structure

The M.Phil. in Health Economics programme encompasses both taught courses as well as producing a dissertation. The taught courses are delivered within three semesters. Semester one and two mainly consist of compulsory courses that render the student competent in an economic analysis of modern health care systems. After successfully completing the taught part of the programme in two semesters, students move on to their

thesis research. In semester three, student undertakes only two elective courses and starts developing his/her proposal for the dissertation in close consultation with the programme coordinator and the potential advisor/supervisor.

Through the thesis, students are expected to gain the ability to independently identify a relevant and substantial research question, the methodology for its solution, and the impact of the results at a practice and policy level. To make this a fruitful learning experience, students are systematically guided throughout their thesis work by an academic tutor.

2.5 Teaching and Learning Methods

Learning mainly takes place in interactive lectures and through group/individual learning assignments. Frequent seminars complement the student centred learning approach of the programme. Comprehensive relevant access to literature supports the students' individual learning. State of the art library and computer labs facilitates the learning environment at PIDE.

Coursework revolves around problem and case-based learning activities to develop the applicable skills required for health economics research and practice. These skills include: analytical problem formulation, assessment and analysis of economic data, and the use of decision analytic software. Emphasis will be given to identification of the key objectives and assumptions of health economics research and practice, evaluation of the relevant evidence, and methods of interpreting data and avoiding logical inconsistencies. Through the various learning activities, the student gains self-confidence and professionalism by presenting and defending their ideas and views before critical audiences, as well as actively listening to the arguments and perspectives of others.

2.6 Programme Duration, Credits and Medium of Instruction

The M.Phil. Health Economics is a two years degree programme comprising of four semesters. The first two semesters and part of third semester are dedicated to course work, culminating in an end-of-semester examination for each semester. In the third and fourth semester, all students write a dissertation. All semesters are followed by a

semester break of at least two weeks duration.

The programme consists of 45 credits, of which 30 credits are for course work (24 for core and 6 for elective courses), and 15 credit hours are for dissertation. English is the medium of instruction and examination for the M.Phil. Health Economics programme.

2.7 Course Distribution

The distribution of the core and elective courses is given in the following table:

Course Names			
Course Codes	Core Courses	Credit Hours	Prerequisites
HE-603	Economic Theory	3	-
HE-610	Statistics and Econometrics	3	-
HE-625	Issues in Public Health	3	-
HE-635	Economic Evaluation Methods	3	-
HE-650	Healthcare Organisation, Analysis and Management	3	-
HE-660	Healthcare Financing and Health Insurance	3	-
HE-680	Health Policy and Planning	3	-
HE-690	Research Methods	3	-
Elective Courses			
HE-700	Health and Population Dynamics	1.5	-
HE-704	Health and Epidemiology	1.5	-
HE-708	Economics of Social Policy	1.5	-
HE-710	Environment and Health	1.5	-
HE-715	Occupational Health	1.5	-
HE-720	Hospital Management	1.5	-
HE-725	Advanced Econometrics	1.5	HE-610
HE-730	Health Technology Assessment	1.5	-
HE-735	Pharmaceutical Economics	1.5	-
HE-736	Poverty and Health	1.5	-
HE-740	Modelling in Health Economics	1.5	HE-635
HE-775	Ethics in Healthcare	1.5	-
HE-799	Thesis	15	

2.8 Semester-wise Courses Distribution

The semester-wise distribution of core and elective courses is given in the following table:

Semester I

Course Name	Credit Hours
Economic Theory	3
Statistics and Econometrics	3
Healthcare Organisation, Analysis and Management	3
Issues in Public Health	3
Optional 1	1.5

Semester II

Course Name	Credit Hours
Healthcare Financing and Health Insurance	3
Economic Evaluation Methods	3
Research Methods	3
Health Policy and Planning	3
Optional 2	1.5

Semester III

Course Name	Credit Hours
Optional 3	1.5
Optional 4	1.5
Thesis	

Semester IV

Course Name	Credit Hours
Thesis	

2.9 Registration of Courses¹

(a) Within the 1st week of a semester, students shall register in the course(s) being offered by

¹ For updated and further details, please consult Student Handbook.

the department on prescribed registration cards.

- (b) A student may change or drop course(s) or convert a credit course into a non-credit course, or vice-versa, within two weeks from the date of commencement of a semester. In exceptional cases, a student can add/drop a course in the 3rd week from the start of the semester with the permission of the Head of the department.
- (c) The Head of each department shall forward in the 3rd week from the date of commencement of a semester all the course registration cards to the Controller of Examinations.
- (d)(i) No registration or change of course(s) shall be allowed after three weeks from the date of commencement of the semester.

(ii) No drop of course(s) or change of a non-credit course to credit course or of a credit course to a non-credit course shall be allowed after three weeks from the date of commencement of the semester.
- (e)(i) A student dropping all the registered courses or choosing not to register minimum required credits in concerned semester will deem to have dropped the semester.

(ii) The dropped semester shall be counted towards the maximum period allowed for completing the M.Phil. degree.

2.10 Method of Assessment/Examination

The students are evaluated during each course and on the basis of:

Formative assessment which is a mix of the tests, class and home assignments, class participation, interactive discussions, practical exercises and/or group works depending on the course outline (on-going assessment).

Summative assessment based on the end of semester examination papers. Summative assessments are held at the end of first three semesters for each registered course.

The Dissertation work is assessed through a viva voce examination on the basis of a structured format covering the quality of the project, work performed in the field, data generation and analysis and presentation of results, discussion and conclusions presented as a written thesis.

Fifty percent marks shall be reserved for the on-going (formative) assessment and fifty percent for the end of semester examination (summative assessment). Candidates obtaining less than 50% in any of the examinations will be deemed to have failed in that paper/semester of the M.Phil. Health Economics. A student failing in a paper (when scores of semester examination and on-going assessment are less than fifty percent), will be allowed to clear that paper after registering for it again. However, a student accumulating more than two failures in a given course at any stage shall cease to be a student of the University.

A student shall be eligible to appear in the summative examination provided that:

- i. He/she has been on the rolls of the Institute during the semester.
- ii. Has registered himself/herself for the courses of study.
- iii. Has attended not less than 80 percent of the lectures/seminars delivered to his/her class in each course. The Head of the programme may, on the recommendation of the concerned teacher, condone the deficiency in the attendance up to 5 per cent of the total lectures and seminars.
- iv. Has paid all the PIDE dues

Candidates passing all the courses shall be declared to have passed the M.Phil. Health Economics programme and shall be awarded the degree.

2.11 Grades and Promotions

- (a) The minimum pass marks for each course shall be 50 percent. The performance of candidates in course work shall be graded as in the following:

Marks	Grades
Less than 50	F
50-54	C-
55-59	C
60-64	C+
65-69	B-
70-74	B
75-79	B+

80-84	A-
85-89	A
90 and above	A+

(b) If a student fails to appear in the summative examination of a course on any reasons, he/she be treated as absent and failed.

(c)

- i. A student must maintain a GPA of at least 2.5 in the registered course work of each semester. Student whose GPA falls short of the minimum required level in a semester will be deemed to have failed in the semester.
- ii. A student, who has failed may be given one chance as a concession to continue his/her studies. Such a concession shall be granted ONLY ONCE during the entire period of study for the degree.
- iii. A student failing TWICE to meet condition (i) shall cease to be a student of the Institute.
- iv. A student who obtains "F" grade twice in a course shall also cease to be a student of the Institute.
- v. A student who fails to complete all the requirements of M.Phil. degree within the maximum prescribed period or authorised extended period will cease to be the student of the Institute.

(d) A student may re-register a course (when offered next) to improve 'C' grade(s). In case of re-registration, no additional time will be admissible beyond the maximum period provided under the rules.

(e) A minimum CGPA of 3.0 out of 4.0 is required for an M.Phil. degree.

(f) The result of a student in each course, whether passed or failed, shall be indicated on the transcript by letter grade. A separate transcript shall also be issued to each candidate showing the marks and grades obtained in each course, and also

the percentage marks and the overall grade and CGPA. Grade Point (GP) shall be determined on the basis of Numerical Grade in the manner shown in Appendix to these regulations.

(g) Grade Point Average (GPA) shall be calculated in accordance with the following formula:

Sum of (GPE x Cr)/ Total credits where

GPE = grade points earned in a course

Cr = credits of the corresponding course

(and sum is over all the courses)

(h) The Cumulative Grade Point Average (CGPA) at the end of a semester shall be the Grade Point Average of all the courses which have been passed up to that time.

3. Course Catalogue for M. Phil. In Health Economics

3.1 Core Courses

3.1.1 HE-603: Economic Theory

This course will introduce the economic theory concepts to first semester level students of Mphil Health Economics. It will be comprised of two sections. First section will deal with the Microeconomics and second Macroeconomics. In the first section post-graduate level concepts for theory of consumer behaviour and demand analysis; market demand and elasticity; production functions; cost of production; profit maximisation and supply; theory of market behaviour; and market structures. In this section students will learn to apply microeconomic theories and tools to health systems, to health care consumer behaviour and to healthcare providers. In the second section concepts of national income accounting; theories of consumption and their implications; savings and investment; long run economic growth; the IS-LM analysis; economic fluctuations and business cycles will be discussed. This course will also discuss macroeconomic concepts for health including performance, and structure of national or regional economy and its effect on health.

3.1.2 HE-610: Statistics and Econometrics

This course provides training on application of statistical and econometric techniques for problems solving and decision making. The students will be provided training on measures of averages and dispersion; probability theory; distribution and expectations; probability distribution of mean and percentages; sampling and estimation; hypothesis testing; analysis of variance; non-parametric and Bayesian statistics. The econometric component provides an introduction to the econometric techniques that are available to estimate economic relationships and are used in best practice empirical research, and considers problems that may be encountered when applying these techniques. It examines simple and multiple regression models, the incorrect choice of explanatory variables, autocorrelation and heteroskedasticity. This module provides experience in the use of modern econometric software to apply appropriate techniques to empirical problems.

3.1.4 HE-635: Economic Evaluation Methods

This course explores the nature, purpose and limitations of economic analysis and evaluation, public and private perspectives, measurement and valuation, analysis of costs, performance and effectiveness, cost-effectiveness, cost benefit analysis and cost utility analysis. The course will also address risk adjustment, concepts of QALYs and DALYs and valuation of human life.

3.1.5 HE-650: Healthcare Organisation, Analysis and Management

This course introduces the concept of a health system, its various components, and the influences of the surrounding socioeconomic and cultural environment. Participants shall become familiar with the methods used to assess the health system in general and healthcare delivery system in particular. The role of various private and public sector agencies (including NGOs) and their interrelationship with respect to their impact on the improvement of health systems at all levels will be analysed. The course also aims to give a broad overview of problems facing the management of health care services, and a more detailed examination of several key topics of current concern, such as the management of information, capital and nursing resources, and resource allocation by formula. Particular emphasis is placed on the detailed application of the principles of sound economic analysis and financial management to problems of health care management.

3.1.6 HE-660: Healthcare Financing and Health Insurance

This course provides a critical analysis of different models of financing health systems. The topic includes: asymmetric information and agency; adverse selection and moral hazards; role and rationale of non-profits firms in health care; health insurance; social health insurance; comparative health care systems and health system reforms; theory and practice of regulated (managed) competition. The course will also cover topics in the financial management of health care institutions.

3.1.7 HE-680: Health Policy and Planning

This course will build upon their existing Health Systems concepts. The focus of this

course is on the tools and techniques of operational planning as well as the strategic planning. It will provide the participants a basis on how to critically analyse, develop and improve health policies. Participants will develop an understanding of the need for a health policy, and be equipped with the methods and tools of policy. This course will also introduce participants to the means and methods of planning at the central level. Participants will be given an insight into how macro-plans relate to district plans and be able to identify constraints, limitations and problems with implementing macro-plans for improving peripheral health services.

3.1.8 HE-690: Research Methods

This course will provide an opportunity for students to establish or advance their understanding of research through critical exploration of research approaches and methods. The course introduces the elements of the research process within quantitative, qualitative, and mixed methods approaches. Participants will use these theoretical underpinnings to begin to critically review literature relevant to the field of study, analyse it and then present it in written and verbal form. Upon completion of this course the students are expected to have the knowledge and skills to plan, and take on, an independent critical investigation and evaluation of a chosen research topic relevant to the field of health economics. The course plans to inculcate the skills to systematically identify relevant theory and concepts, relate these to appropriate methodologies, both quantitative and qualitative, and draw appropriate conclusions. Engage in systematic discovery and critical review of appropriate and relevant information sources and communicate research concepts and contexts clearly and effectively both in writing and orally.

3.2 Elective Courses

3.2.1 HE-700: Health and Population Dynamics

This course develops students understanding on demographic profile of the population and population dynamics. The topics include population theories; population growth and economic development; fertility trends; labour market behaviour; mortality and issues of population ageing; population growth and the environment; spatial distribution of population; internal migration and urbanisation; population policies and health sector.

3.2.2 HE-704: Health and Epidemiology

This course in epidemiology is designed with the objective of introducing the subject and its fundamental principles, uses and methods. The students will become familiar with principles of screening, surveillance, measures of disease frequency and associations. They will be able to understand epidemiological study design and interpret data in a scientific manner.

3.2.3 HE-708: Economics of Social Policy

This course provides an overview how instruments of economics can be usefully employed to analyse social policy. This course addresses key issues as economic aspects of social policy; social health policy; economics of pensions; access to health services; pension programmes; unemployment; economic demography; immigration; discrimination; impact of unemployment and inflation; poverty and family support. It examines the objectives of social policy, and alternative concepts and measures of equity, poverty and welfare, and alternative instruments and schemes for achieving these objectives.

3.2.4 HE-710: Environment and Health

This course provides an overview of linkages between environment and health; human activities which are damaging to the environment and human health; and how much the environment contributes to the burden of major diseases. Topics covered include issues in environment, health and safety, such as safe drinking water, environmental transmission of infectious diseases, allergies, food quality and contamination, nutrition, waste management, occupational disease and injury, risk assessment and management. The course will examine health issues, scientific understanding of causes, and possible future approaches to control of the major emerging environmental health problems in industrialized and developing countries

3.2.5 HE-715: Occupational Health

This course specifically focuses on occupational health problems. The emphasis is on problems encountered in developing countries, in the rural and urban setting. It begins

by describing exposure-disease relationships in the workplace and then goes on to discuss the various control measures available to minimize such exposures. Ergonomics and acute and chronic injuries are also discussed. Other issues that are covered include occupational epidemiology, industrial hygiene, workers' compensation, and the mechanism for delivery of occupational health services.

3.2.6 HE-720: Hospital Management

This course is aimed at enhancing the skills of participants in hospital management in order to improve the quality of services being provided in hospitals. Participants will familiarize themselves with the essential components of a hospital system, and the fundamental principles of management of hospitals with respect to financial, physical and personnel resource management.

3.2.7 HE-725: Advanced Econometrics

This is an advanced level econometrics course and improves students' knowledge base on use of econometrics. The topics include: non-linear models and estimation algorithms; simultaneous equations; estimation with limited dependent variables; data censoring and selectivity bias; concept of stationarity; ARIMA, ARCH and VAR models; forecasting and time series decomposition; causality and response analysis; multivariate decomposition and co-integration and error correction analysis.

3.2.8 HE-730: Health Technology Assessment

This course is designed to provide an overview of process of systematically reviewing existing evidence on medical technologies, procedures and services. It also covers topics on evaluation of health interventions, their safety, effectiveness, cost-effectiveness and impact on the health system.

3.2.9 HE-735: Pharmaceutical Economics

This course acquaints students with essential concepts and tools of pharmaceutical policy and economics with application to developing countries. Topics include: the role of international agencies and organisations; patents and access to medicines; public private partnerships and medicines developments; pharmaceutical regulation and

legislation; economics for medicines management; financing strategies; quality of pharmaceutical care.

3.2.10 HE-736: Poverty and Health

This course introduces students to the history of the concept of poverty, the causes of poverty and its effects, and intersections between poverty and health. Policies designed to alleviate poverty will be analysed at both the global or international level and from community perspectives. Health has association with poverty at both micro and macro levels. Investment in health is linked with improvement in life expectancy, more time for work, more earnings, and improvement in well-being and prosperity. The course will also focus on issues of global health inequality and nature and extent of global inequalities in health, and the possible policy responses to improving health and well-being, and reducing observed disparities. The implications of the health crisis that afflicts the poorest countries, especially in Asia and Africa will be also examined. The course will mainly focus on following topics: poverty and inequality, health inequality: concepts, measurement and patterns, intra-household inequality, global inequality in burden of disease, effectiveness of programs and policy, food and nutrition, and macroeconomics and health.

3.2.11 HE-740: Modeling in Health Economics

This course imparts training on the practical application of mathematical modelling to support and inform evidence-based healthcare decision problems. The course develops professional level analytical skill-base to evaluate and improve the efficiency and effectiveness of healthcare systems.

3.2.12 HE-775: Ethics in Health Care

As healthcare ethics is an interdisciplinary field, the issues range from broad theological and philosophical considerations to more technical considerations of medicine, the delivery of healthcare and health law, as well as issues and considerations that are unique to the field of healthcare ethics. This course therefore provides an introduction to ethics in health management. It analyses issues of values in health systems, health actors, health policies, health values and power with a behavioural

perspective. It also analyses issues of rational decision-making.

3.3 Preparation for Research Proposal and Thesis Write Up

The students will conduct literature review and prepare research proposals on areas of their interest. The students will write thesis individually under the supervision of a faculty member. The purpose of this assignment is to illustrate the depth of skills and knowledge that have been developed through the M.Phil. programme. The students will apply their knowledge of quantitative and/or qualitative methodologies to their own area of interest. The research thesis should be of a quality to be considered for publication in a refereed journal. We also encourage our students to prepare one or more working papers from their thesis which will then be published by CPHSP².

² For further and updated details, please consult Student Handbook.

4. Admission Criteria & Procedures

4.1 Introduction

The Department abides by its strict merit-based criteria with absolute transparency to select its students for the M.Phil. Health Economics programme.

4.2 Eligibility Criteria

4.2.1 Academic Qualifications

Candidate should have completed 16 years of education (master and/or BS honours degree) from an HEC recognised national or international university, with a minimum of 2.5 CGPA (semester system) or 2nd Division (annual system). The candidates awaiting results of their master or honours degrees may also apply for admission. Their admission is conditional on obtaining at least 2nd Division (annual system)/2.5 CGPA (semester system) in their respective BS honors/Master programs.

4.2.2 Work Experience

Candidates who have work experience in health, economics or health economics related fields in either the private sector or the public sector, such as (but not limited to) economic and health planning, financial management in health sector, pharmaceuticals, health insurance and hospital management are encouraged to apply for this program.

4.3 Age Limit

There is no age limit for the candidates for M.Phil. Health Economics programme. PIDE inherently believes in freedom of education at any age.

4.4 English Language Requirements

Applicants should have an appropriate level of English language proficiency. Foreign applicants from non-English speaking countries are required to submit results for English proficiency tests such as TOEFL or IELTS. A minimum TOEFL score of 450 on the

paper-based test or 200 on the computer-based test is recommended; a minimum IELTS score of 6 is recommended. The Pakistani students are not required to submit the results of their English language proficiency tests. Their English language skills will be tested through the selection process.

Admissions shall be made once a year in the fall semester. Each candidate shall submit an application for admission on a prescribed form in response to an advertisement. Admission shall be made on the basis of PIDE entry test score, academic record, and interview. All the admissions shall be approved by the Dean of the Faculty concerned on the recommendations of the Admission Committee of the concerned department. PIDE may revise criteria for determining merit for admission from time to time. Admission to one department shall not give a student a right to migrate to another department in PIDE. Transfer of credits is not allowed.

4.5 Application Procedures

Applications must be made on the prescribed original application form available in the prospectus of the M.Phil. Health Economics Programme. This form is attached at the end of this prospectus (see Annex 1). The prospectus and application form may also be downloaded from the Institute's website (www.pide.org.pk). The Application Form must be completed fully either typed or printed legibly by hand. Be sure to sign the Application Form. There is also an option of online form submission available at the same website.

Copies of transcripts, duly certified, must be submitted when required by the department in case of online or physical submission of application. All documents in languages other than English and Urdu must be accompanied by officially certified English translations.

Application Fee: Deposit online **Rs.1,500.00 (Rupees one thousand only)** in our **A/C No. 02940010862301, HBL QAU Branch and attach original receipt along with application**. [If a candidate applies for more than one Programme, he/she should submit additional charges of Rs.500.00 (Rupees five hundred only) per additional Programme].

Completed Applications should enclose the following:

1. Filled & signed application form
2. Photographs
3. Deposit online Rs. 1,500/- in our A/C No. 02940010862301, HBL QAU Branch and attach original receipt along with application.
4. TOEFL/IELTS Result (Foreign Students only)
5. Certified copies of academic record, both sides.

4.6 Admission Procedures

4.6.1 M.Phil. Health Economics Admissions Committee

Each academic discipline at PIDE has its own Admissions Committee. The Committee has the responsibility for the selection of applicants to be admitted to the Programmes. It establishes procedures for the timely review of applications to the Programme. Deferrals of admission are at the discretion of the Admissions Committee.

4.6.2 Screening Examination

Pakistani applicants and foreign applicants residing in Pakistan who fulfil the eligibility criteria (see the eligibility criteria 4.2) will be required to take a screening examination test. This examination tests basic public health knowledge, basic economics knowledge, basic English and mathematical skills, and logical thinking.

Following the screening examination, successful applicants will be short-listed and called for interviews. International applicants residing outside of Pakistan will be selected on the basis of their qualifications and professional experience relevant to health and economics related disciplines. They will be exempt from the admission test and from the interview.

4.6.3 Final Selection

The applicant's acceptance is contingent upon the receipt of all required documents including official transcripts. THE HE Admission Committee is responsible for identifying those students with missing documents and/or credentials which do not meet eligibility

standards. The final decision regarding the selection of the candidates rests with the Admissions Committee and cannot be contested. Students offered admission should return the letter of acceptance to the Registrar, PIDE, within ten days of receiving the letter. If the letter of acceptance is not received within the stipulated time, the next candidate on the waiting list will be offered the admission.

5. Fee Structure

5.1 Fee Structure for Pakistani Students

The fee structure for the Pakistani students for the entire degree is as follows in Pakistani Rupee (PKR):

Type of Fee	Amount in PKR
Registration Fee (one time)	10,000
Library Security deposit (one time, refundable)	5,000
Transport charges (per semester)	4,000
Tuition Fee	3,300 per credit hour
Thesis Fee	15,000 per semester
Transcript Fee	500

5.2 Fee Structure for International Students

The international students may contact the Admission Office regarding the current fee structure of M.Phil. in Health Economics programme.

5.3 Financial Assistance

Scholarships will be given to provide partial funding for students on the basis of both merit and need. These scholarships will be awarded by a number of willing development organizations and PIDE. The funds will be administered by the Department directly. Students who are admitted into the M.Phil. Health Economics programme should submit an application to the Head, Department of Health Economics, stating the reasons they feel they should receive the scholarship. Forms for applying for the stipends can be obtained from the programme office and duly filled and returned at the start of the

semester³. Teaching and Research Assistantships are also available for outstanding students.

³ *Note:* The Fee structure and Criteria for Financial support may change as per PIDE policy.

6. Faculty Index

The current faculty directory, including both full time core faculty and adjunct faculty members, is given below. More faculty members are likely to be inducted in near future.

6.1 Core Faculty

Dr. Mahmood Khalid, PhD (Head of the Department)

Dr. Asad Zaman, PhD

Dr. Durr-e-Nayab, PhD

Dr. Rizwan ul Haq, PhD

Dr. Shujjat Farooq, PhD

Dr. Ahsan-ul-Haq Satti, PhD

Dr. Saqlain Raza, PhD

Mr. Ajmal Jahangeer, Coordinator

6.2 Adjunct Faculty

Dr. Shahzad Ali Khan, PhD

Dr. Shahzad Ali, PhD

Dr. Konrad Obermann, PhD

Dr. Babar Tasneem Sheikh, PhD

Dr. Imran Masood Durrani, MBBS, MPH

Dr. Saira Siddique, MBBS, MSPH

6.3 Academic Partnerships and Collaborations

PIDE has a lasting tradition of having international links and collaborations. Along with being a host to various Nobel Laureates, who stayed at PIDE as visiting scholars, the Institute has a long history of collaborative researches with organisations like the World Bank, the Asian Development Bank, the International Development Research Centre (IDRC), DFID, USAID, Friedrich-Ebert Stiftung (FES) and various UN organisations.

The Department carrying on this tradition is forming links with several national and international organisations. Currently, the Department is collaborating with GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) Health Sector Support Programme Pakistan for the development and delivery of the M.Phil. Health Economics programme. In addition it is in the process of developing collaborations with various institutes and bodies in different capacities through formal and informal linkages to achieve its goal such as FES (Friedrich-Ebert-Stiftung), IDRC (international Development Research Centre, University of Heidelberg, DAAD (German Academic Exchange Services), Agha Khan University, University of York, Australian National University (ANU) and the London School of Economics (LSE).

7. Admission Application and Deadlines

7.1. Application Form

Applications must be made on the prescribed original application form available in the prospectus of the M.Phil. Health Economics Programme or online on PIDE website (www.pide.org.pk). Copies of transcripts, duly certified, must be submitted with the Application Form. All documents in languages other than English and Urdu must be accompanied by officially certified English translations.

Completed Applications should enclose the following:

1. Filled & signed application form
2. Photographs
3. Deposit online Rs. 1,500/- in our A/C No. 02940010862301, HBL QAU Branch and attach original receipt along with application.
4. TOEFL/IELTS Result (Foreign Students only)
5. Certified copies of academic record.

7.2. Important Deadlines

Application Deadline: July 22, 2015

Entrance Test: August 02, 2015

Interview (of shortlisted candidates): August 03, 2015

Merit List: August 10, 2015

Start of Session: August 31, 2015

7.3. Submission Procedure

Address your application to:

The Registrar,

Pakistan Institute of Development Economics,

P. O. Box 1091, Islamabad 44000, Pakistan

Please make sure your application reaches the Registrar well in time before the deadline of **July 22, 2015**.

1. Have you been a student of PIDE before? Yes No
 If yes, give details: Registration No. _____ Year _____
 Programme (MSc/MBA/MPhil/MS/Ph.D) _____ Department _____
 Have completed the degree? Yes No If not, why, specify the reasons for not completing (cancelled, ceased, expelled, others) _____
2. Are you presently enrolled in a college/university/institution? Yes No If yes, give details of institution alongwith programme, discipline and year _____
3. Are you presently employed? Yes No if yes, place of employment _____
4. Will you require hostel facility? Yes No
5. From where did you get information about admission at PIDE?
 Newspaper (which) _____ PIDE Website PIDE Employee
 Existing PIDE Students Alumni Others _____

DECLARATION BY THE APPLICANT:

I hereby solemnly declare that the information provided by me in this Application Form of admission is true and accurate to the best of my knowledge and belief. I understand that concealment of fact or giving false information will make me ineligible for admission and that if anything is found incorrect after successful admission, PIDE has the right to cancel my admission at any stage. I will abide by all the existing rules and regulations and any other rules and regulations framed from time to time by PIDE. I further declare that I will maintain good behaviour during my whole period of study at PIDE. I will deposit all the dues in the prescribed time regularly. I have read the instructions carefully. I undertake that I am fully eligible.

 Applicant's signature

Date: _____

DECLARATION BY THE PARENTS/GUARDIAN:

I am entirely responsible for the behaviour and conduct of my son/daughter/ward during his/her stay at PIDE and shall cooperate with PIDE authorities in this regard as required by PIDE.

 Parent's/Guardian signature

Date: _____

FOR OFFICE USE ONLY

Discipline: _____

Recommendation of the concerned department:

Mr./Ms. _____ is eligible for conditional or unconditional admission to PhD/MPhil/MSc/MBA program in _____

Signature of the HOD _____

Date: _____

Signature of the Dean _____

Date: _____

INSTRUCTIONS FOR APPLICANT

1. Attested copies of the required documents as per checklist should accompany the application.
2. Original documents must be produced at the time of interview for admission.
3. Finally selected candidates for admission shall be required to produce a migration certificate (in original) on joining PIDE.
4. Finally selected candidates for admission shall be required to submit an affidavit on a non judicial stamp paper to the effect that the certificates submitted by him/her are genuine and in case of incorrect/misleading information or concealment of facts, PIDE shall have a right to refuse/cancel the admission, expel the student from the University and initiate legal action against him/her.
5. Candidates having obtained certificate/degrees from foreign universities/institutions should provide equivalence certificates.
6. All entries in the form must be made in BLOCK LETTERS.
7. Tick (✓) the appropriate fields in check list such as Yes, No, N/A (Not Applicable).
8. Application processing fee of Rs.1500/- shall be deposited either online in PIDE A/C No.02940010862301, HBL QAU Branch or shall deposit in person at HBL, QAU branch through Challan Form.
9. Candidate who applies in more than one discipline has to deposit the processing fee of Rs.500/- for each additional discipline.
10. Application processing fee through bank draft will not be entertained.
11. Incomplete application forms shall not be entertained.

CHECKLIST

S. No.	Requirements	Confirmation		
		YES	NO	N/A
1.	Detailed Marks Certificate of SSC (Matriculation)/O-Level			
2.	Detailed Marks Certificate of F.A./F.S.c (Intermediate)/A-Level			
3.	Detailed Marks Certificate of BA/BSc/BBA			
4.	Detailed Marks Certificate of Master/BS (4 years)			
5.	Detailed Marks Certificate of MPhil/MS			
6.	Equivalence Certificate in case of qualifications or degree/certificate from foreign universities/institutes only			
7.	Computerized National Identity Card (CNIC)			
8.	CNIC of Father/Guardian			
9.	Two recent photographs duly attested with name written on back side			
10.	Domicile Certificate of candidate			
11.	Character Certificate from the institution last attended			
12.	In service applicants are required to produce NOC/study leave duly sanctioned by the employer.			
13.	Non refundable application processing fee receipt/bank challan in original			

Postal Address

Pakistan Institute of Development Economics (PIDE)
 Quaid-i-Azam University Campus, Islamabad
 Telephone: 051-9248074, 9248101, 9248098 Fax: 051-9248065
 email address: admissions@pide.org.pk
www.pide.org.pk