COMSATS Institute of Information Technology
Registrar Office, Principal Seat, Islamabad
*****

No: CIIT-Reg/Notif-664/12/988

July 3, 2012

NOTIFICATION

Scheme of Studies of Doctor of Philosophy (PhD) in Mathematics

It is hereby notified that the Academic Council in its 13th meeting held on June 04, 2012 approved the following scheme of studies of Doctor of Philosophy (PhD) in Mathematics program with effect from Fall 2012 at CIIT system:

	Minimum No. of Courses	Minimum No. of Credit Hours
1. PhD Course Work	06	18
2. PhD Thesis		09

Note:
All Rules and Regulations approved by BASAR from time to time shall be applicable

This issues with the approval of the Competent Authority.

Nadeem Uddin Qureshi
Additional Registrar

Encl: (pages 03 in total including this page)

Distribution:
1. Dean Faculty of Science, CIIT
2. All Directors CIIT System
3. Chairperson, Department of Mathematics, CIIT
4. Incharge, CIIT Islamabad Campus.
5. All Incharges, Academic Sections, CIIT Campuses
6. All HoD's/Incharges, Department of Mathematics, CIIT Campuses
7. Controller of Examinations, CIIT
8. All Incharges, Examination Departments, CIIT Campuses

CC:
1. PS to Rector
2. PA to Registrar

List of Graduate Courses

Sr.	Course Code	Course Title	Credit Hours
1	MTH601	Hilbert Space Methods	3(3, 0)
2	MTH602	Optimization Theory	3(3, 0)
3	MTH603	Perturbation Methods I	3(3, 0)
4	MTH604	Fixed Point Theory and Applications	3(3, 0)
5	MTH605	Numerical Solution of ODEs	3(3, 0)
6	MTH606	Advanced Numerical Analysis	3(3, 0)
7	MTH607	Numerical Linear Algebra	3(3, 0)
8	MTH608	Approximation Theory and Applications	3(3, 0)
9	MTH609	Advanced Partial Differential Equations	3(3, 0)
10	MTH610	Variational Inequalities & Applications	3(3, 0)
11	MTH611	Integral Inequalities	3(3, 0)
12	MTH612	Numerical Solutions of PDEs I	3(3, 0)
13	MTH615	Advanced Mathematical Statistics	3(3, 0)
14	MTH616	Time Series Analysis and Forecasting	3(3, 0)
15	MTH617	Linear Statistical Models	3(3, 0)
16	MTH618	Advanced Topics in Graph Theory	3(3, 0)
17	MTH619	Commutative Algebra	3(3, 0)
18	MTH620	Advanced Topology I	3(3, 0)
19	MTH621	Algebraic Topology	3(3, 0)
20	MTH622	Mathematical Analysis	3(3, 0)
21	MTH623	General Relativity	3(3, 0)
22	MTH624	Probability Models and Application	3(3, 0)
23	MTH625	Numerical Optimization	3(3, 0)
24	MTH631	Topology	3(3, 0)
25	MTH632	Geometric Function Theory	3(3, 0)
26	MTH633	Advanced Convex Analysis	3(3, 0)
27	MTH634	Advanced Modern Algebra with Applications	3(3, 0)
28	MTH635	Theory of Groups	3(3, 0)
29	MTH636	Representation Theory of Finite Groups	3(3, 0)
30	MTH637	Field Extensions and Galois Theory	3(3, 0)
31	MTH638	Advanced Topology II	3(3, 0)
32	MTH640	Differential Subordinations and Applications	3(3, 0)
33	MTH641	Convolutions in Geometric Function Theory	3(3, 0)
34	MTH642	Semigroup Theory	3(3, 0)
35	MTH650	Theory of Abel Grassmann's Groupoids	3(3, 0)
36	MTH651	Symmetry Methods in Differential Equations	3(3, 0)
37	MTH652	General Linear Model	3(3, 0)
38	MTH653	Multivariate Analysis in Mathematics	3(3, 0)
39	MTH654	Continuum Mechanics	3(3, 0)
40	MTH655	Numerical Simulation of Reactive Flows	3(3, 0)
41	MTH661	Viscous Fluids I	3(3, 0)

	Course Code	Course Title	Credit Hours
42	MTH662	Viscous Fluids II	3(3, 0)
43	MTH663	Perturbation Methods II	3(3, 0)
44	MTH664	Numerical Solutions of PDEs II	3(3, 0)
45	MTH665	Heat Transfer	3(3,0)
46	MTH666	Elastodynamics	3(3, 0)
47	MTH667	Fluid and Thermodynamics	3(3, 0)
48	MTH668	Magnetohydrodynamics	3(3, 0)
49	MTH669	Group Theoretic Methods	3(3, 0)
50	MTH670	Advanced Analytical Dynamics	3(3, 0)
51	MTH671	Momentum and Thermal Boundary Layer Theory	3(3, 0)
52	MTH672	MHD and Porous Media	3(3, 0)
53	MTH673	Physical Turbulent Flows	3(3, 0)
54	MTH710	Numerical Methods for Variational Inequalities	3(3, 0)
55	MTH761	Non-Newtonian Fluid Mechanics	3(3, 0)
56	MTH762	Spectral Methods in Fluid Dynamics	3(3, 0)
57	MTH763	Topics in Applied Mathematics	3(3, 0)
58	MTH764	Topics in Pure Mathematics	3(3, 0)
59	MTH765	Topics in Numerical Mathematics	3(3, 0)
60	MTH766	Simple Linear Regression Model	3(3, 0)
61	MTH767	Multiple Linear Regression Model	3(3, 0)
62	MTH768	Topics in Mathematical Statistics	3(3, 0)
63	MTH769	Topics in Applied Commutative Algebra	3(3, 0)
64	MTH771	Numerical Methods for Incompressible Flows	3(3, 0)

Thesis

Course Code	Course Title	Credit Hours
MTH900	Thesis	9