

CLUSTER INNOVATION CENTRE

(University of Delhi)



Meta University Concept based Course

M.Sc. (MATHEMATICS EDUCATION)

A joint degree postgraduate program by

University of Delhi & Jamia Millia Islamia



META UNIVERSITY CONCEPT NOTE

M.Sc. (MATHEMATICS EDUCATION)

PHILOSOPHY: The Meta University concept marks a paradigm shift in Higher Education in India. It is based on the premise that the 'Whole is Greater than the Sum of the Parts'. By drawing upon the established excellence of the partners, the Meta University concept can utilize, exploit and create synergy between programmes, activities and institutions. It shall serve as a platform for communication, collaboration and co-operation that will optimize scarce resources as well as free students from the tyranny of boundaries and the constraints of location. Using India's growing IT tools, the Meta University concept combines the best in traditional systems with the new opportunities for knowledge enhancement. The programme will bring benefits to all stakeholders with its expected outcomes:

- New programmes
- Flexible platforms
- Wide reach - transcends the tyranny of geography & tradition
- Greater inter and trans-disciplinarity
- Higher level of co-operation & collaboration between institutions
- Unleashing new ideas
- Innovation for problem solving

KEY INGREDIENTS OF THE META UNIVERSITY MODEL:

- Creates a new paradigm in knowledge systems
- Reliance on National Knowledge Network
- Pooling of resources by different institutions
- Creation of synergies in innovative programmes
- Use of information technology for virtual learning
- Innovation in knowledge acquisition
- Combining “Collaborative learning” and “Trans-disciplinary learning”
- Mentor to serve as the Catalyst

OBJECTIVES OF M.Sc. (MATHEMATICS EDUCATION):

- To move away from the conventional pedagogy of teaching mathematics especially at school level and to include methods of facilitating learning such as storytelling, projects, group work and participative learning.
- To use technology as significant aid in learning.
- To impart knowledge of some basic concepts and principles of the discipline.
- To establish inter-disciplinarity between mathematics and other subjects from Humanities and the Social Sciences.
- To encourage collaborative learning through group activities and hands-on learning.
- To provide in-service training for schoolteachers.
- To learn to apply mathematics to real life situations and help in problem solving.

METHODOLOGY:

Under the concept of Meta University, M.Sc. (Mathematics Education) is a joint degree two year postgraduate programme jointly offered by University of Delhi and Jamia Millia Islamia. Cluster Innovation Centre (CIC), University of Delhi, administratively manages the program. The program aims to give the students some theoretical inputs and substantial hands-on experience in knowledge making. The Degree course reflects a transdisciplinary approach and will promote fresh viewpoints, making the learning and teaching process joyful and productive.

Teaching may adopt several platforms including classroom, virtual and project based learning. Interactive methods of instruction will be encouraged. Students will take combinations of courses at both Jamia Millia Islamia and at the University of Delhi.

Hands on learning, integrating school internships and innovation projects will be given vital importance. Mentors shall play key role in-group project work. Mentors will be carefully selected for their expertise in the relevant areas. They may be from both within the partner institutions and outside.