## DescriptionAbout

## M. Arch. Computer Applications Course

Digital design is an emerging area in Architecture and the M.Arch Computer Applications program is designed to prepare students to specialize in this area which has a high potential in future architectural career. Concepts from computation and contemporary sciences and their impact in the domain of architecture and urban design are investigated. This course encourages inquiries into methods and representations for design, the development of design tools, applications of digital technologies to design practice, the impacts of these technologies on the built environment and their social and cultural implications. Students enrolled in Computer Applications take subjects and do research in theory and applications of computation and computer technology including computer graphics, digital modeling and rendering, generative design, CAD/CAM and rapid prototyping technologies, remote collaborative design, and the design processes and management systems. It will probe concepts such as behavioural, parametric and generative design, algorithmic logic and key ideas from quantum physics, biology and systems theory as a knowledge resource and means of production. A productive dialogue will be initiated with experts from other fields, including mathematics, computer science and engineering, under the larger collaborative platform of Computational design. Students are exposed to various new concepts like: Digital Tectonics, Digital Morphogenesis, Parametric design, Generative architecture, Performative Design, Parametric Urbanism, Hypertecture and Evolutionary prototyping. The program has a main digital design studio which runs through three semesters culminating in the thesis. Students undertake professional training during the course too.