



---

# MASTER OF COMPUTER APPLICATION

---

Syllabus w.e.f. the Academic Session 2020-2021



MAULANA ABUL KALAM AZAD  
UNIVERSITY OF TECHNOLOGY,  
WEST BENGAL



MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY  
WEST BENGAL

## Second Year: Semester-IV

**Code: MCAN-O401**

**Paper: Open Elective**

**Contacts Hours / Week: Not applicable** **Total Contact Hours: Not applicable**

**Credit: 3**

### Open Elective

- Business Analytics
- Robotics
- Bioinformatics
- Information Theory & Coding
- Automation in VLSI Design
- Intelligent Control
- Design of Embedded Systems
- Machine Learning
- Soft Computing
- Information Retrieval
- Distributed System
- Digital Marketing

*(While opting for a domain for pursuing the online course, a student needs to ensure that the domain was not covered in previous semesters of the program.)*

Student may opt for a minimum 12-week online course from Massive Open Online Courses (MOOCs) in one or any of the above domains with prior approval from the University and/or his/her Institution. In such case, student needs to submit a self-attested copy of the mark-sheet of this online course to college well before the end of Semester IV. Directly on the basis of the result obtained by a student, final marks will be allocated to him/her. In case a student pursues a non-evaluation based online course, an in-house evaluation would be done.

**Code: MCAN-481**

**Paper: Comprehensive Viva-Voce**

**Contacts Hours / Week: Not Applicable**

**Total Contact Hours: Not Applicable**

**Credit: 2**

**Course Objective**

Objective of comprehensive viva-voce is to assess the overall knowledge of the student in the relevant field of computer science and application acquired over 2 years of study in the MCA Program.

The viva shall normally cover the subjects taught in all the semesters of MCA Program. This will test the student's learning and understanding during the course. In doing so, the main objective of this course is to prepare the students to face interview both in the academic and the industrial sector.

**Code: MCAN-482**

**Paper: Major Project & Viva-Voce**

**Contacts Hours / Week: 28**

**Total Contact Hours: 12-15 Weeks**

**Credit: 20**

**A student needs to pursue a research/application based project in any of the following modes:**

[A] In his/her institution under the supervision/mentorship of assigned teacher(s) belonging to that institution.

[B] In his/her institution under the joint supervision/mentorship of assigned teacher(s) belonging to that institution and invited external expert(s).

[C] In a research/software/hardware organization under the joint supervision/mentorship of assigned teacher(s) belonging to that institution and external expert(s) belonging to that research/software/hardware organization.

On completion of the same, an evaluation will be made by the institution on the basis of Project Report, Project Presentation, Viva-voce and sufficient measures will be taken by the institution to understand that the project is an outcome based work as a product of student's sole effort.