

BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY
DEPARTMENT OF COMPUTER SCIENCE
REVISED COURSE STRUCTURE & SYLLABUS FOR THREE YEARS
MASTER OF TECHNOLOGY (COMPUTER SCIENCE) (M. TECH. (CS))

W.E.F. 2019-20

FIRST YEAR

1st Semester

Total Semester Credit: 24

Paper Code	Paper Title	Paper Type	Credit
MTCS -101	Advanced Computer Architecture	Core	04
MTCS -102	Mathematical Foundation of Computer Science	Foundation- Compulsory	04
MTCS -103	Analysis and Design of Algorithm	Core	04
MTCS -104(A) MTCS -104(B) MTCS -104(C)	Elective-I 1. Advanced Software Engineering 2. Advanced Database Management System 3. Artificial Intelligence	Elective	04
MTCS -105	Programming Lab-I (Based on paper MTCS-103)	Core	04
	Open Elective Paper- I*	Open Elective	04

* Student shall register for this course from other department of the University

Note: Department offers course “MTC SOE-101 Introduction to Computer Networks” of 04 credit under CBCS for the students of other departments in the University

2nd Semester

Total Semester Credit: 24

Paper Code	Paper Title	Paper Type	Credit
MTCS -201	Advanced Computer Networks	Core	04
MTCS -202(A) MTCS -202(B) MTCS -202(C)	Elective-II Advanced Computer Graphics Cloud Computing Digital Image Processing	Elective	04
MTCS -203(A) MTCS-203(B) MTCS-203(C)	Elective-III Mobile Computing Object Oriented Software Engineering Neural Networks	Elective	04
MTCS-204	Seminar	Foundation-Compulsory	04
MTCS -205	Programming Lab-II (Based on paper MTCS-203)	Core	04
	Open Elective Paper- II**	Open Elective	04

* Seminar topic shall be selected from the emerging technical/ research areas; internal evaluation shall be done on the basis of review of literature, content quality, understanding of the topic and presentation. End term evaluation will be done on the basis of report submitted by the student along with viva voce.

**Student shall register for this course from other department of the University

Note: Department offers course “MTCSOE-201 Object Oriented Concepts with C++” of 4 credit under CBCS for the students of other departments in the University

SECOND YEAR

3rd Semester

Total Semester Credit: 24

Paper Code	Paper Title	Paper Type	Credit
MTCS-301	Theory of Computation	Core	06
MTCS-302(A) MTCS-302(B) MTCS-302(C)	Elective-IV Advanced Operating System Soft Computing Cryptography and Stenography	Elective	06
MTCS-303(A) MTCS-303(B) MTCS-303(C)	Elective-V Big Data Analytics Internet of Things Machine Learning	Elective	04
MTCS-304	Dissertation*	Core	08

*Dissertation shall be done under the supervision of guide allotted by the Department. Student shall pursue the dissertation work by reviewing the relevant literature of his/ her interest in research areas. Evaluation shall be done based on understanding/ formation of research ideas, submission of report and presentation covering future action plans. Topic of final semester dissertation shall be finalized.

4th Semester

Total Semester Credit: 24

Paper Code	Paper Title	Paper Type	Credit
MTCS-401	Presentation and Progress Report*	Core	04
MTCS-402	Dissertation**	Core	20

*A mid term presentation will be held to discuss the progress of each student.

** Two copies of dissertation report shall be submitted in the department along with its soft copy in pdf format.

