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MCA Program Admission Brochure for BIT Mesra (Mesra), BIT Mesra(Lalpur) its Off Campuses at Noida & Jaipur- Academic Year 2024-25

Master of Computer Application

Introduction

INTRODUCTION

Master of Computer Applications (MCA) Program is of 2 years duration and the program is offered at BIT Mesra (Mersra), BIT Mesra (Lalpur) and its Off Campuses at Noida & Jaipur.

The Master of Computer Applications (MCA) program offered by the Department of Computer Science, BIT Mesra is one of the most coveted Post Graduate courses in the Institute. The course was originally designed as a three-year program to produce top quality, industry ready professionals who would provide tremendous value addition to the burgeoning IT service sector in the country.

In conformance with the guidelines issued by AICTE, the program is now being offered with a reduced tenure of two years, which features an intensive course curriculum and a multitude of sessional and laboratory courses. The course structure has been carefully designed with an even mix of courses addressing core facets of computer science and IT applications. We regularly invite eminent experts form the Industry and academia to moderate our course structures and are committed to updating them regularly to keep them relevant. Accredited by the National Board of Accreditation1, the MCA program provides ample opportunities to students to hone their programming, application development and software engineering skills which are in high demand in the IT sector.

Acknowledging the fact that the best way to learn is by doing, the course provides for a compulsory one semester Industry Internship, during which students spend time across India's top IT companies, learning the nuances of applying their skills to practical IT challenges. The program also features courses from the domains of Social Sciences, Management, Soft skills etc., which are important ingredients in producing truly committed professionals who appreciate the social, ethical and economical needs of the nation.

The program also ensures that all students get to explore their own aptitudes to the fullest by offering a vast array of electives, which students can opt for from the second semester onwards. These electives have been carefully curated to be in sync with the demands of the Industry and add to the value of the course.

It is this pursuit and commitment towards excellence that has been acknowledged by the Industry and each year some of the best IT companies from India and abroad visit the Institute to offer placement opportunities to the students of the MCA program. We are proud that for over three decades the MCA program has maintained an enviable placement record and our alumni now occupy positions of eminence across many corporates spread across the globe.

Important Dates

IMPORTANT DATES

Filling of Online Application Form commence from	08.04.2024
Last Date to Apply	10.06.2024
Issue of Admit Card	09.06.2024
Date for Online Entrance Test	16.06.2024
Declaration of Result	28.06.2024

Note: All the dates mentioned above are tentative, and liable to be changed. Hence, please check our Institute website periodically.

Placements

Eligibility Criteria

1. Candidates must hold a Bachelor's Degree or equivalent qualification of any of the Universities incorporated by an act of the central or state legislatures in India or other educational institutions established by an act of Parliament or declared to be deemed as a University under section 3 of UGC Act, 1956, or possess an equivalent qualification recognized by the Ministry of HRD, Government of India / AIU. This degree must entail a minimum of three years of education after completing higher secondary schooling [Class 12 or equivalent] (10+2+3 system).

2. **Candidates must have one of following qualifications:**
    a. **Bachelor of Computer Applications OR**
    b. **B.Sc. in Computer Science OR**
    c. **B.Sc. in Information Technology OR**
    d. **B.Sc. in Computer Applications**

3. Candidates with above mentioned qualifications must have minimum 55% (50% for SC/ST/PwD) marks in average in graduation, marks to be computed as average of marks obtained in all subjects in which the candidate has appeared. [Candidates with B.Sc. Honours must have minimum 55% (50% for SC/ST/PwD) marks in average in their Honours subject].

4. Candidates appearing for final examinations of their Bachelor's Program in 2024 can also apply, provided they have obtained requisite marks or equivalent (as per item 3 above) based on latest available grades / marks at the time of applying, and if selected can join the program provisionally. At the time of reporting for the verification of documents cum admission such an applicant must bring a certificate in original from the Principal of Institute stating that:

    a. by ……………… 2024, (s)/he will have appeared for examination in all subjects required for obtaining his/her Bachelor's degree.

    b. (s)/he has obtained requisite marks or equivalent (as per item 3 above), based on latest available grades / marks.

    Provisionally selected candidates will be required to sign an undertaking at the time of admission on Non-Judicial Stamp Paper of Rs. 20/- (as format given in Annexure -I).

    Further, their admission will be confirmed only when they submit the mark sheet and a certificate of having passed the Bachelor's degree / equivalent qualification with requisite marks as per item 3 above. They must submit proof of passing their final examinations with requisite marks by **31 October 2024.** Non-fulfillment of this condition will automatically result in the cancellation of the provisional admission.

5. **Candidates with qualifications acquired through correspondence or distance-learning programs are eligible only if (a) the programs are recognized by the DEC-IGNOU (b) they have passed the qualifying examination at the time of applying, with minimum requisite marks in average calculated as per item (3) above. They must carry original copy of pass certificate, marksheets of qualifying examination and proof of Institute recognized by the DEC-IGNOU along with their application during admission. [Appearing candidate in distance learning programs, whose results are yet to be declared, are not eligible to apply].**

Notes:

1. Candidates with foreign diplomas should see the EdCIL website for equivalence (http://www.edcil.co.in), and if required should obtain an equivalence certificate from the evaluation division of the AIU (website http://www.aiuweb.org).

2. In case any Board / University awards grades instead of marks, the calculation of equivalent marks would be based on the procedure prescribed by the Board / University. In case a University does not have any scheme for converting CGPA into equivalent marks, the equivalence would be established by dividing obtained CGPA with the maximum possible CGPA and multiplying the resultant with 100.

3. At any level of the studies [class X, class XII or graduation], a candidate / applicant must have passed all the required subjects at that level from the same Board/ University.

Application and Reservation Policy

How to Apply:

1. To fill online application form, click on the link **"APPLY ONLINE"** to register for the program and create password for the application process. Do not share the password with anybody. **Please see instructions for filling online application form.**

2. Eligible candidates must complete and submit the application form online only [link available on the Institute website www.bitmesra.ac.in (http://www.bitmesra.ac.in/)].

3. Pay application fee of Rs.1,500/- (General / OBC /EWS candidates) and Rs.1,000/- (SC/ST candidates) through Online Payment Gateway (candidates may use net banking / debit card / credit card of any nationalized bank) till the last date of application process. **Fee once remitted shall not be refunded.**

4. The candidates may select multiple choice of place for study **MAXIMUM OF THREE CAMPUSES,** in order of preference from the prompt. **Candidates will not be permitted to alter their preferences at a later stage**.

5. Candidates should proceed to fill the Online Application Form only after they satisfy themselves that they fulfill all the eligibility criteria.

Form / Application Numbers

The Form / Application numbers on each online application form may be noted and cited in correspondence, if required.

Selection Procedures:

- Provisional selection will be based on performance of candidates in MCA Online Entrance Test conducted by the Institute, subject to fulfilling eligibility conditions mentioned under eligibility criteria.

- Admission will be offered, subject to fulfillment of the eligibility conditions.

- The waitlisted candidates may be called for verification of documents and admission against the vacant seats, if any, in successive rounds, as required. The same will be intimated on the Institute website only. **No separate intimation will be sent to candidates**.

Cancelation of Admission Offer:

- The admission of a candidate will be automatically canceled:

    - if any information provided in the application form is found incorrect or missing.

    - who fail to submit the final degree / qualifying examination in time as stipulated or fail to secure minimum eligible marks in the degree / qualifying examination.

Note: Eligible SC/ST, OBC, PwD students admitted to MCA Program at any of the Campus should submit their scholarship form in the Scholarship Section of the Campus for the academic year by February for processing scholarship to SC/ST, OBC, PwD students each year, as per UGC guidelines.

Reservations:

Currently the Institute follows reservations as given below for its MCA Program.

1. For all programs at the Institute which are supported by any of the respective State Governments, the reservation criteria for the state quota are as per the norms of the respective State Government.

2. For all other programs the reservation criteria for SC & ST are as per the statutory norms of Central Govt. (SC -15% & ST - 7.5%)

3. The Institute observes statutory reservation for Persons with Disability (5%).

4. Upto 1 seat at all Campuses is reserved for candidates who are Sons or Daughters of Kashmiri Migrant who otherwise have qualified for admissions.

5. Upto 10% seats are reserved for candidates belonging to Economically Weaker Section (EWS).

6. 50% of the total seats are reserved for candidates who have passed / are appearing for qualifying examination (graduation) from the state in which Campus is located. (The "State of Eligibility" of a candidate for the purpose will be determined based on location of his/her College where (s)/he has passed/is appearing for the qualifying examination / graduation).

[In case sufficient numbers of suitable candidates from any group are not available, the Institute reserves the right to fill the seats from the other group].

However, the final reservation proportion will depend on notification, if any, issued by competent authority and as accepted by the Institute.

Note: Please select the state of eligibility from drop down box while filling the online application form. (Examples):

	State of Eligibility
Qualifying examination (graduation) from Jharkhand	**Jharkhand**
Qualifying examination (graduation) from Rajasthan	**Rajasthan**
Qualifying examination (graduation) from West Bengal	**West Bengal**
Qualifying examination (graduation) from Uttar Pradesh	**Uttar Pradesh**
Qualifying examination (graduation) from Delhi	**Delhi**
Qualifying examination (graduation) from Andhra Pradesh	**Andhra Pradesh**

The Online Computer Based Test, Syllabus and Selection Procedure

The Online Computer Based Test:

The Online Computer Based Test for shortlisting candidates for admission to its 2 Years [4 Semesters] full-time MCA Program will be conducted by the Institute at national level. Please refer Section 9 for the details of the Test.

Date of Online Entrance Test: 16.06.2024 (Sunday)

Mode of Examination: Proctored Based Online Test.

Duration of Online Test: 2 hours [10 am to 12 Noon]

Modalities related to Entrance Test shall be updated soon on this page.

Syllabus for the Online Entrance Test:

SYLLABUS FOR MCA ENTRANCE 2024

PART - A: Computer Fundamentals

Total Number of MCQ Questions: 50 of One Mark Each

Section 1:   Digital Logic

Boolean algebra. Combinational and sequential circuits. Number representations and computer arithmetic (fixed and floating point).

Section 2: Computer Organization and Architecture

Machine instructions and addressing modes. ALU, control unit. Instruction pipelining, pipeline hazards. Memory hierarchy: cache, main memory and secondary storage.

Section 3: Programming and Data Structures

Programming in C. Recursion. Arrays, stacks, queues, linked lists, trees, binary search trees.

Section 4: Algorithms

Searching, sorting, Asymptotic worst-case time and space complexity. Algorithm design techniques: greedy, divide-and-conquer.

Section 5: Operating System

Processes, inter-process communication, concurrency and synchronization. Deadlock. CPU and I/O scheduling. Memory management and virtual memory.

Section 6: Databases

ER-model. Relational model, SQL. Integrity constraints, normal forms, Transactions and concurrency control.

Section 7: Computer Networks

OSI and TCP/IP Protocol Stacks, circuit and packet switching, framing, IP addressing, IPv4, flow control, error control.

Section 8: Software Engineering

Software Development Life Cycle Model (Waterfall, prototype, Spiral, Evolutionary, Agile), Design Concepts.

PART - B: Mathematical, Analytical ability, Logical Reasoning and General English

Total Number of MCQ Questions: 50 of One Mark Each

Section 1:   Mathematics

Sets, relations, functions, Combinatorics: counting.

Probability and Statistics: Uniform, normal, exponential, Poisson and binomial distributions. Mean, median, mode and standard deviation. Conditional probability and Bayes theorem.

Section 2: Analytical ability & Logical reasoning

The questions in this section will cover logical situation and questions based on the facts given in the question.

Section 3: General English

Questions in this section will be designed to test the candidates' general understanding of the English language. Comprehension, vocabulary, Basic English Grammar (like usage of correct forms of verbs, prepositions and articles), word power, synonyms and antonyms, meaning of words and phrases, technical writing.

SELECTION AND QUALIFYING PROCEDURE FOR MCA 2024

Comprises of an online written examination, followed by interview of shortlisted candidates who qualify the written test.

1. Computer Based Online Examination : Multiple Choice Objective (MCO) Questions of 1 mark each with **No Negative Marks**.

Part	Topics Covered	No of questions	Marks	Qualyfying Marks (100)	Weightage
A	Computer Fundamentals	50	50	35	40%
B	Mathematical, Analytical Ability, Logical Reasoning and General English	50	50		

2. Online Interview / Merit List : Only for those candidates who qualify the written test.

	Marks	Qualifying Marks	Weightage	Qualifying for Merit List : Interview + Test marks (out of 100) and Rank
Interview	100	40	60%	Marks ≥ 38 AND Rank in the top 600

Course Strucure

Course Structure MCA (/UploadedDocuments/admadmission/files/MCA_PROGRAMME%20COURSE%20STRUCTURE.pdf)

Fee Structure

To be updated soon.

Financial Assistance and Scholarship

Scholarship:

The financial assistance to few deserving students(who are not availing any other fellowships) shall be offered @ Rs. 6500/- per month, for 3rd and 4th semesters (only during physical stay at the campus), completing first two semesters without any backlog and securing CGPA ≥ 8 in each semester.

Contact Us

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