

UTKAL UNIVERSITY
SCHOOL OF MATHEMATICS, STATISTICS AND COMPUTER
SCIENCE
VANI VIHAR, BHUBANESWAR - 751004
ADMISSION NOTICE
ACADEMIC SESSION: 2014-2015

Applications are invited for admission into the following sponsored courses under the School.

(i) 2-year M. Tech. (Computer Science)

Eligibility: passed (a) Master's degree in Computer Science/IT/ Computer Applications/Mathematics/ Statistics/ Electronics/Physics or (b) Bachelor's Degree in Engineering/Technology(B.E./B. Technology) or (c)AMIE examination/B-level examination of DOEACC or (d) Master's Degree in ITM/ Math. and Computing/AMIEIE with at least 55% of marks (50% marks for SC/ST candidates) in the qualifying examination.

Date of entrance Test : June 25, 2014.

(ii) 5-Year Integrated M.C.A.

Eligibility: passed (a) +2 examination of CHSE, Odisha or equivalent examination with Mathematics/ Statistics /Business Mathematics or (b) 3 Year diploma examination in Engineering conducted by the State Council of Technical Education and Training.

Date of entrance Test : June 28, 2014.

(iii) 2- Year M.Sc. (Computer Science)

Eligibility: passed (a) B.Sc. Degree with Computer Science as a Core subject or (b) B.Sc. in Information Technology and Management or (c) B.Sc. in Information Science and Telecommunication or (d) BCA or (e) B.Sc. (Hons.) in I.T. with at least 50% marks in aggregate (45% marks for SC/ST candidates) in the qualifying examination.

Date of entrance Test : June 26, 2014.

Admission into the above courses shall be based on entrance test only.

Application form and information brochure can be obtained by downloading from the **Web Site** <http://www.utkaluniversity.ac.in/> from **May 10, 2014**. Candidates are required to submit two Bank Drafts i.e., (i) **Rs. 150/-** drawn in favour of "**Comptroller of Finance, Utkal University**" payable at any nationalized bank located at Bhubaneswar, and (ii) **Rs.350/-** drawn in favour of "**Director, School of Mathematics, Statistics and Computer Science, Utkal University**" payable at any nationalized bank located at Bhubaneswar at the time of submission of the application form.

Candidates are required to submit the duly filled in application form either personally in the office of the respective Department between 11.00 A.M. to 1.30 P.M. on all working days or by Registered post. The respective departments are not responsible for any postal delay.

Last date of submission of the application form is June 05, 2014.

Chairman, P.G. Council

INFORMATION BROCHURE
and
APPLICATION FORM
2014-2015



Sponsored Courses

M. Tech. (Computer Science)
5-Year Integrated M.C.A.
M.Sc. (Computer Science)

SCHOOL OF
MATHEMATICS-STATISTICS-COMPUTER SCIENCE

UTKAL UNIVERSITY
VANI VIHAR, BHUBANESWAR-751004
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0. Some General Informations

0.1 The School

The School of Mathematics-Statistics-Computer Science (SMSC) was established in 1999 with the following three constituent departments:

- a. P.G. Department of Mathematics
- b. P.G. Department of Statistics
- c. P.G. Department of Computer Science and Applications.

In addition to the regular M.A. /M.Sc., M.Phil. and Ph.D. courses in Mathematics, Statistics, MCA, ME, and Ph.D. courses in Computer Science, the following self supporting sponsored courses are offered for the academic session 2013-2014.

- (i) 2 Year M.Tech. (Comp. Sc.) (Year of Institution 1999)
- (ii) 5 Year Integrated (MCA) (Year of Institution 1999)
- (iii) 2 Year M.Sc.(Comp.Sc.) (Year of Institution 2001)

All the sponsored courses under the school are based on semester system. The 5 year integrated MCA course has its own building, while the M.Tech. (Comp. Sc.) and M. Sc. (Comp. Sc.) are located, respectively in the P.G. Department of Mathematics and Computer Sc. & Applications. The libraries of the sponsored courses under the school have substantial collection of texts, journals for the use of the students and the teachers.

0.2 Reservation & Weightage Policy for Different Categories

In each sponsored course, the reservation and weightage policy as have been accepted by the P.G. Council shall be followed in respect of candidates belonging to the SC/ST/Physically Handicapped/Children of Ex or In servicemen/Sports Personnel categories.

Category Code:

A candidate while filling up the serial No.5 of the application form (supplied along with the Brochure) must mention the Category Code applicable to him/her in the box provided. The following table furnishes the Category Codes.

<u>Category</u>	<u>Code</u>
Scheduled Caste	01
Scheduled Tribe	02
Child of Ex-Serviceman	03
Child of Serving Defence Personnel	04
Physically Handicapped Candidate	05
Sports/Games Personnel	06
General Category Candidate	07

(If a candidate for example, claims to be a sports personnel who has represented the country or the State or the University in a sport event during last 3 years, then he/she must enter the code 06 in the box at serial No.5 of the application form)

Note: The claim of a candidate for being considered in the reserved categories or obtaining weightage shall be forfeited if the category code is incorrectly entered or not entered in the application form.

03. ISSUE OF APPLICATION FORMS

Prescribed application form & information brochure can be downloaded from the web site <http://www.utkaluniversity.ac.in>

04. DOCUMENTS TO BE SUBMITTED WITH THE APPLICATION FORM:

A candidate must submit the following documents along with the application form failing which the application form will be rejected.

- (i) Attested photo copies of mark sheets and certificates of all examinations passed.
- (ii) Conversion certificate from the concerned University/Institution indicating the conversion of Grade/CGPA to equivalent % of marks (in case Grade/CGPA is awarded in an examination).
- (iii) Photo copy of admit card in case the result of the qualifying examination has not been published.
- (iv) Attested photocopy of SC/ST certificate, Ex-Serviceman, Serving Defence Personnel certificate, Physically Handicapped certificate, Sports certificate from competent authority in case the candidate claims himself/herself to be in one of the categories 01 to 06.
- (v) No objection certificate from the employer, if the applicant is employed.
- (vi) Three recent passport size photographs pasted at the appropriate space in the application form.

- (vii) Four address slips for communications and correspondence and the check list.
- (viii) **Two Bank drafts (i) of Rs. 350/- (Rupees Three Hundred Fifty only) drawn in favour of "Director, School of Mathematics, Statistics and Computer Science, Utkal University" payable at any nationalised bank located at Bhubaneswar towards the entrance examination expenses, and (ii) of Rs. 150/- (Rupees One Hundred Fifty only) drawn in favour of "Comptroller of Finance, Utkal University" payable at any nationalised bank located at Bhubaneswar.**

- Note:**
- (a) The Physically Handicapped certificate and ID card have to be issued by Dist. Welfare Officer/ Community Development Officer/ Social Welfare Dept., State Govt. The SC/ST certificates have to be issued by M.P./MLA/Collector/ ADM/ SDO/Local Gazetted Revenue Officer not below the rank of Dy-Collector/Tahasildar. The Sports/Game certificates have to be issued by the Director of Sports/ Sports Council of the University countersigned by the Principal of the college. The Ex-Serviceman certificate has to be issued by Rajya Sainik Board.
 - (b) Students of the sponsored courses are not eligible to be members of the Students Union, Athletic Club and Dramatic Club of the University.
 - (c) All the rules formulated by the P.G. Council, Utkal University from time to time are applicable for admission into sponsored courses.

1. **M. TECH. (COMPUTER SCIENCE)**

1.1 OBJECTIVE:

The M.Tech. (Computer Science) programme is designed to provide an opportunity to undertake an advanced study in Computer Science to the students who have a degree in Computer Science and also to those who have adequate foundation in Mathematics and allied subjects, but without a degree in Computer Science. Accordingly, the programme incorporates a balanced mixture of both theoretical and professional training in the latest trends in Computer Science and Technology so that after successful completion of the programme a student becomes qualified

- (i) to be software professional who can design and develop system and application software's,
- (ii) to take up an academic career for further study and research in fundamental and applied aspects of Computer Science and Technology.

1.2 SCOPE

The M. Tech. (Comp. Sc.) programme is spanned over a period of two years consisting of four semesters having intensive course work (both Theory and Practical) and Project/ Dissertation.

1.3 STRENGTH

The number of students to be admitted into M. Tech. (Comp. Sc) programme is 30.

The seats will be filled up as per the merit list of the entrance examination. Reservation policy accepted by the P.G. Council, Utkal University shall be followed.

1.4 ADMISSION

(A) Eligibility:

A candidate seeking admission into this programme should have passed with at least 55% marks (50% for SC/ST candidates) in one of the following examinations:

- (i) Master's Degree Exam. in Computer Science/IT/Computer Applications/Mathematics/Statistics/ Electronics/ Physics OR
- (ii) Bachelor's Degree in Engineering/ Technology (B.E./B.Tech.) OR
- (iii) AMIE Examination/ B-level examination of DOEACC.
- (iv) Master's Degree in ITM/ Math. & Computing / AMIEIE.

Note: Candidates who have not been awarded percentage of marks, but only Grade/CGPA, must along with their application form, produce the conversion certificate from the concerned University/Institution indicating the conversion of Grade/CGPA to equivalent % of marks failing which, their application forms are liable to be rejected.

(B) Application Procedure:

Eligible candidates desiring admission into M.Tech. (Comp. Sc.) programme should apply in the prescribed application form available with this Information Brochure. Students appearing at the qualifying examination may also apply and appear the entrance test subject to the following provisions.

If the result of the qualifying examination has not been published by the time of admission, a candidate may be admitted into the course provisionally as per the merit list, provided that such candidates shall submit their result securing at least 55% (50% in case of SC/ST candidates) of marks before they fill up forms of the Semester-I examination of the M.Tech. (Comp. Sc.) programme, failing which their admission into the M.Tech. (Comp. Sc.) programme shall be cancelled without any refund of the course fee and other fees.

Application forms duly filled in and complete in all respect should be sent by registered post or through any person to the Course Co-ordinator, M. Tech. (Computer Science), P.G. Department of Mathematics, Utkal University, Bhubaneswar-751004 so as to be received on or before 5th June, 2014 between 11A.M.-1.30 P.M. on all working days. Application form received after 5th June, 2014 or incomplete in any respect will be rejected. The Department will not be held responsible for postal delay.

(C) Documents as mentioned in 0.4 must be attached to the application form.

(D) Selection Procedure:

Selection of candidates for admission shall be made on the basis of an entrance test to be conducted by the School of Mathematics-Statistics-Computer Science on **25.06.2014 (10A.M.-1P.M.)**. The entrance test shall be of three hours duration and shall contain questions on:

- (i) Mathematics up to the Bachelor's Degree Level (Pass Course) (40% weightage)
- (ii) Computer Fundamentals and Programming (40% weightage)
- (iii) Logical Reasoning (20% weightage)

The questions form parts (i), (ii) and (iii) shall be objective type only.

SYLLABUS FOR ENTRANCE TEST:**Part (i) : Mathematics**

- (a) Sets, Relations, Functions, Real numbers, Inequalities, Binomial Theorem, Complex numbers, Mathematical Induction, Number Theory (Divisibility, Congruence, Primality)
- (b) Permutations and Combinations, Elementary Probability, Independent events, Conditional Probability and Bayes Theorem, Binomial, Poisson & Normal distributions.
- (c) Vector spaces, Linear independence, Dimension, Matrices, Rank and Inverse, Solution of linear equations, Determinants, Eigen values and Eigen vectors.
- (d) Co-ordinate Geometry: Circles, Conic sections, Lines in space, Planes, Spheres.
- (e) Sequence and Series of numbers, Limit and Continuity of a function, Differentiation and Integration with Applications, Maxima/Minima, Taylor and Maclaurin series, Power series, Quadrature.
- (f) Ordinary Diff. Equn., Diff. of functions of several variables, Multiple Integrals and Vector Calculus.
- (g) Numerical Analysis: Computer Arithmetic, Errors in Computations, Solution of non-linear equations, Interpolation, Numerical Differentiation and Integration, Solutions of system of Linear Equations.

Part (ii): Computer Fundamentals & Programming:

- (a) Flow charts and algorithms.
- (b) Programming in C: Data Type, Constants & Variables, Operators & expressions in/output, Control Constructs, Functions, Arrays.
- (c) Basic Digital Electronics (Electronics Logic Gates, Logic functions, Flip-Flops, Shift Register, Counters Decoders, Multiplexers, PLDs) and Computer Organisation.
- (d) Elementary Data Structure: Stacks, Queues, Arrays, Linked lists and Trees.
- (e) Introduction to Operating System, Data Base System and Computer Networks.

Sample questions (objective type):

- (a) If A is an invertible matrix and $A^2 = A$, then what is the inverse of A?
- (b) The communication line between the CPU, memory and peripherals is called a.....

- (c) A team of four students has to be selected from among A, B, C, D, E, F and G with the following conditions:
 A and C must be together
 G and D must be together
 B will not be with F
 F will not be with A
 E will not be with A
 What will be the selected team?

1.5 COURSE FEE & OTHER FEES

The course fees for two years is Rs.70, 000/- to be paid in two instalments (Rs.45, 000/- at the time of admission and Rs.25, 000/- at the beginning of the second academic session). In addition, the students are required to pay admission fees, examination fees etc. as prescribed by the P.G. Council/Utkal University.

1.6 DOCUMENTS & FEES REQUIRED AT THE TIME OF ADMISSION:

- (i) Original Certificate and Mark sheet of qualifying examination and all others examinations.
- (ii) College Leaving Certificate and H.S.C Examination Certificate (original)
- (iii) Original Conduct Certificate of the last Institution attended.
- (iv) Three Photographs (Stamp Size)
- (v) Utkal University Registration Receipt (for students of Utkal University)
- (vi) Original Certificates as mentioned in 0.4 (iii), if applicable.
- (vii) Relieve order from the competent authority in case of employed candidates.
- (viii) Rs. 45,000/- towards first instalment of the course fee in the form of Bank Draft & admission fees as prescribed by the P.G. Council, Utkal University.

1.7 SCHEDULES FOR ADMISSION AND TEACHING:

Last date of receipt of application form (duly filled in)	: 05.06.2014
Date and Time of Entrance Test	: 25. 06. 2014 (10A.M.-1P.M.)
Admission (tentative)	: 3 rd week of July, 2014.
Commencement of classes (tentative)	: 4 th Week of July, 2014

Ordinarily the theory and practical classes will be held between 7.00A.M.-10.00A.M. & 5.00 P.M.-9.00P.M., respectively on all working days. In addition to this, the Laboratory shall remain open from 12'O clock to 5.00 P.M. for additional practice.

1.8 FACILITIES AVAILABLE:

The students of this programme shall have the following facilities:

- I
 - (a) The Central Library of the University and the Library located in the P.G. Department of Mathematics which has a rich collection of advanced books in Mathematics, Statistics and Computer Science.
 - (b) The Computer Laboratory for the M. Tech. (Comp. Sc.) programme which has enough Computers running Windows NT and Linux Operating Systems, and has Internet connection.
- II. Eminent persons in the field of Computer Science from reputed institutions are invited regularly for delivering lectures.

For any other information contact:

Course Co-ordinator, M. Tech. (Computer Science)
P.G. Department of Mathematics
Utkal University, Vani Vihar
Bhubaneswar-751004
Telephone: 0674- 2567255

2. **5 YEAR INTEGRATED M.C.A**

2.1 OBJECTIVE:

The objective of the course is to catch the young talents after the +2/ Diploma level and provide them with a balanced mixture of theoretical and professional training in Computer Science and Applications. On successful completion of the course, the students may take up either a professional career in the Software Technology or may pursue an academic career for further study and research in the field of computer Science and Technology.

2.2 SCOPE:

The Integrated MCA program is spanned over a period of 5 years consisting of ten semesters. Candidates successful in all the examinations of first three years of the course will be awarded with Bachelor of Computer Application (BCA) degree by the Utkal University.

2.3 NUMBER OF SEATS

The number of students to be admitted into 5- year Integrated MCA programme is 60.

The seats will be filled up as per the merit list of the entrance examination. Reservation policy accepted by the P.G. Council, Utkal University shall be followed.

2.4 ADMISSION

(a) Eligibility:

The candidates must have passed +2 Examination of CHSE, Odisha or equivalent examinations with Mathematics/ Statistics/ Business Mathematics

OR

Three year diploma in engineering examination conducted by the State Council of Technical Education & Training.

(b) Application Procedure:

Eligible candidates desiring admission into the Integrated MCA programme should apply in the form prescribed. Students appearing at the qualifying examination may also apply and appear at the entrance test. However, they have to fulfil the eligibility requirements by the time of admission.

Application forms duly filled in and complete in all respect should be sent by registered post or through any person to the Course Co-ordinator, 5-Yr. IMCA, IMCA Building , Utkal University, Vani Vihar, Bhubaneswar-751004 so as to be received on or before 5th June, 2014 between 11A.M.-1.30 P.M. on all working days. Application form received after 5th June, 2014 or incomplete in any respect will be rejected. The Department will not be held responsible for postal delay.

(c) Documents to be attached to the application form (see instruction at 0.4)

(d) Selection Procedure:

Selection of candidates for admission shall be made on the basis of an entrance test to be conducted by the School of Mathematics – Statistics- Computer Science on 28.06.2014 (2.00 PM-4.00 PM) on the following topics:

- | | |
|--------------------------------|---------------------------|
| (i) Mathematics | (ii) Business Mathematics |
| (iii) Probability & Statistics | (iv) Computer Awareness |
| (v) Mental Ability | |

With weightage of 40%, 10%, 10% and 30% respectively. The questions shall be of objective type.

(e) Syllabus for Entrance Test:

SECTION – A

I. MATHEMATICS (40%)

(A) Logic, Set Theory and Functions:

Statement, Negation, Implication, Conjunction, Disjunction, Truth Table Different Methods of proof such as Induction methods (implication and contra positive methods).

Set, Subset, Power set of a set, Similarity, Union, Intersection, Complementation of sets, De Morgan's Laws. Cartesian products, Relations and Functions (trigonometric, exponential and quadratic polynomials).

(B) Number System:

Arithmetic of Natural numbers, Rational numbers, Inadequacy of rationals, Irrationals, Properties of real numbers, Order and Inequality, Complex Numbers.

(C) Trigonometry:

Review of trigonometric concepts up to compound angles, formula involving multiple and submultiples angles, sum and product of sine cosine functions, General solutions of equations, Properties of triangles, Inverse trigonometric functions.

(D) Co-ordinate Geometry:

Rectangular coordinate system, distance and division formula, Equation of lines in different forms, angle between lines, distance of a point from a line, Change of axes (translation only) , polar form , parametric form, Pair of lines and angle between them , Circles Direction Cosines of line, Equation of a plane, line and sphere.

(E) Differential Calculus:

Limit (Convergence) concept of sequence, function, algebra of limit, left and right hand limit, limits of some algebraic, trigonometric, inverse trigonometric, logarithmic, exponential functions, Continuity and discontinuity , Derivative, Geometrical and physical meaning, derivative of sum, product, quotient of functions, chain rule, derivative of algebraic, trigonometric, exponential, logarithmic, composite & inverse functions, Continuity and differentiability. Derivatives of higher order (simple case) Partial Derivative (two variables). Application of derivative, differentials, maxima and minima, tangent and normal of plane curves L.Hospital's Rule and indeterminate forms.

(F) Integral Calculus:

Ant derivative, Indefinite integral, Integration by methods of substitution, by parts by partial fraction. Integration of algebraic, trigonometric, logarithmic, exponential functions, Definite integrals, properties, areas of bounded regions, Differential equation of the form $dy/dx = f(x)$, $dy/dx=f(x) g(y)$, $y^{11} = f(x)$.

(G) Determinants and Matrices:

Properties of determinant (up to third order), minor & cofactors, Cramer's rule, Matrices, algebra of matrices, solutions of simultaneous equations by inverse of matrices.

(H) Permutation & Combination:

Principle of counting, Permutation & Combination with & without repetition, Binomial theorem and Combinatorial identities.

II. BUSINESS MATHEMATICS (10%):

Profit and Loss, Stock and Share, Discounting of bill of exchange, Partnership, Simple and Compound Interest, Annuities, Invoicing.

SECTION-B

I. PROBABILITY AND STATISTICS (10%):

Measures of central tendencies and dispersion, correlation and regression, concept of probability, sample space, calculation of probability, addition and multiplication laws of probability, probability of compound and independent events.

II. COMPUTER AWARENESS (10%):

Function of different parts of computer system. Steps in problem solving using concepts of algorithm and flowcharts. Computer arithmetic: decimal, binary, octal hexadecimal numbers and their conversion and operation. Simple programs in BASIC. Computer terminology.

III. MENTAL ABILITY (30%):

Reasoning Logic, Quantitative Aptitude etc.

Sample Questions:

- (i) What is the area of the region bounded by $y = |x|$ and the line $y = 2$?
- (ii) How much stock can be purchased by investing Rs. 2000 in 8% stock at 5% premium?
- (iii) Let A and B be two possible outcomes of an experiment with $P(A) = 0.4$, $P(A \cup B) = 0.7$ and $P(B) = K$. For what value of K are A and B mutually exclusive?
- (iv) The Octal equivalent of the decimal number 225, 225 is _____
- (v) _____ is a volatile memory.
- (vi) Which is the missing number in the series 3, 12, 27, 48, _____ 108?

2.5 COURSE FEE AND OTHER FEES:

The total course fee for the course is Rs. 1, 50,000/- (Rupees One Lakh Fifty Thousands only) which is to be paid in the following manner.

First instalment (to be deposited at the time of admission)	Rs. 40,000/-
Second instalment (to be deposited at the beginning of 2 nd academic session)	Rs. 30,000/-
Third instalment (to be deposited at the beginning of 3 rd academic session)	Rs. 30,000/-
Fourth instalment (to be deposited at the beginning of 4 th academic session)	Rs. 25,000/-
Fifth instalment (to be deposited at the beginning of 5 th academic session)	Rs. 25,000/-

2.6 Documents (in Original) and Fees etc. required at the time of admission:

- (i) Certificate and mark sheet of H.S.C & qualifying examination
- (ii) College leaving certificates
- (iii) Conduct certificates of the institution last attended
- (iv) Four photographs (stamp size)
- (v) SC/ST certificates (if applicable)
- (vi) Physically Handicapped certificate and ID card issued by District Welfare Officer/ Comm. Dev Officer/ Social Welfare Department of State Government (if applicable)
- (vii) Ex-Serviceman, Serving Defence Personnel certificate (if applicable)
- (viii) Sports/ Games participation certificate in National/ State level sports (if applicable)
- (ix) Relieve order from competent authority in case of employed candidates.
- (x) Course fee for first year (Rs 40,000/-) in the shape of Bank Draft.
- (xi) Electric charges in cash.

2.7 SCHEDULES FOR ADMISSION & TEACHING:

Last date of receipt of application form (duly filled in)	:05-06-2014
Date of Entrance Test	:28-06-2014 (2P.M.- 4P.M.)
Admission (tentative)	:3 rd Week of July, 2014
Commencement of classes (tentative)	:4 th Week of July, 2014

For further information contact:

**Course Coordinator, 5-Year Integrated MCA
5-Yr. Integrated MCA Building
Utkal University, Vani Vihar, Bhubaneswar- 751004
Tel: 9437485212(M)**

3. M. Sc (COMPUTER SCIENCE)

3.1 OBJECTIVE:

The goal of M.Sc. (Computer Science) programme is to produce high quality computer professionals who will cater to the needs of Industry, R & D Organisations, and Educational Institutions. These professionals shall have a broad grasp of the fundamental principles of scientific methods, deep understanding of their areas of specialisation, innovative ability to solve new problems, and the capacity to interact with multidisciplinary groups. With this objective in view, the programme is designed to include a balanced courses of study, seminars and thesis/project.

3.2 SCOPE

This course is spanned over a period of 2 years consisting of four semesters.

3.3 STRENGTH

The number of students to be admitted into the course is 30. Reservation policy for SC/ST/Physically Handicapped and candidates of other categories accepted by the P.G. Council shall be followed.

3.4 ADMISSION

(a) Eligibility:

Passed (a) B.Sc. degree with Computer Science as a core subject or (b) B.Sc. in Information Technology and Management or (c) B.Sc. in Information Science and Telecommunication or (d) B.Sc. (Hons.) in I.T. or (e) BCA, with 50% marks in aggregate (45% for SC/ST candidates) in the qualifying examination.

(b) Application Procedure:

Eligible Candidates seeking admission into M.Sc. (Comp.Sc.) programme should apply in the prescribed form available with this Information Brochure. Students appearing at the qualifying exam can also apply and appear the entrance test subject to fulfilling the minimum eligibility criteria at the time of admission.

Application form duly filled in & complete in all respects should be sent by Regd. Post or through any person to the Course Coordinator, M.Sc. (Comp. Sc.), Department of Computer Science and Applications, Utkal University, Bhubaneswar-751004 so as to be received on or before 5th June, 2014 between 11 A.M – 1.30 P.M on all working days. Application form received after 5th June 2014 or incomplete in any respect will be rejected. The Department will not be held responsible for postal delay.

(c) Documents to be submitted along with application form (See 0.4)

(d) Selection Procedure for Admission:

The selection of candidates for admission shall be made on the basis of an entrance test conducted by the School of Mathematics-Statistics-Computer Science on **26.06.2014(11 A.M.-1 P.M.)**.

(e) Syllabus for Entrance Test:

- (i) Computer Science (based on +3 Syllabus of Utkal University) (70% weightage) Data Structure, Programming in C & C++, Computer Organization, Database Management System, Computer Network.
- (ii) Logical Reasoning (30% weightage)

Sample Questions

- Q1. The EBCDIC code is a ____ bit code.
- Q2. ____ is an optical storage device.
- Q3. What is the missing number in the following series ?
1, 2, 6, 24, ?, 720
- Q4. Find the wrong term in the letter-number series given below.
G 4 T, J 10 R, M 20 P, P 43 N, S 90 L

3.5 COURSE FEE:

The course fee for two years is Rs. 60,000/- to be paid in two instalments (Rs.30, 000/- at the time of admission and Rs.30, 000/- at the beginning of second academic session). In addition, the students are required to pay University Admission Fees, Examination Fees.

3.6 DOCUMENTS TO BE SUBMITTED AT THE TIME OF ADMISSION:

- i) Original Certificate and mark sheet of qualifying Exam.
- ii) Original High School Certificate.
- iii) Original C.L.C.
- iv) Conduct Certificate
- v) 3 Stamp size photographs (self attested on reverse).
- vi) Utkal University registration receipt (in case of Utkal University students).
- vii) Relieve order from Competent Authority in case of employed candidates.
- viii) SC/ST/PH/Sports/Ex-Servicemen Certificate if applicable.
- ix) First instalment of the course fee in the form of Bank Draft.

3.7 SCHEDULES FOR ADMISSION AND TEACHING

Last date of receipt of application form (duly filled in)	: 5 th June, 2014
Date of Entrance Test	: 26 th June, 2014 (11A.M.-1 P.M.)
Admission (tentative)	: 3 rd week of July, 2014
Commencement of Classes (tentative)	: 4 th week of July, 2014

3.8 FACILITIES AVAILABLE:

- i) Library facility from the Central Library of Utkal University shall be provided.
- ii) The students of the course will use the Laboratory of M.Sc. (Comp.Sc.) which has a number of Pentium IV Computers running under Windows XP and Linux Operating System.
- iii) The seminar library has a rich collection of text books in Computer Science, Mathematics and Statistics.
- iv) Eminent Persons in the field of Computer Science from reputed Institutions are invited for delivering lectures.

For further information contact:

**Course Co-ordinator, M.Sc. (Computer Science)
Department of Computer Science & Applications
Utkal University, Vani Vihar, Bhubaneswar-751004
Tel: 9937383933**



UTKAL UNIVERSITY
SCHOOL OF MATHEMATICS, STATISTICS AND COMPUTER SCIENCE
 Vani Vihar, Bhubaneswar-751 004
Application form for admission into
M.Tech. (Comp. Sc.)/ M.Sc. (Comp. Sc.) / 5-Year Integrated MCA
(Strike out which ever is not applicable)
2014-2015

<p><u>For office use only</u></p> <p style="text-align: right;">Course Fee: First Instalment</p> <p>Bank Draft No. & Date: <input style="width: 400px; height: 30px;" type="text"/></p> <p>Index No. <input style="width: 250px; height: 30px;" type="text"/> Roll No. <input style="width: 200px; height: 30px;" type="text"/></p> <p>Date of Admission: _____ Course Co-ordinator _____ Director _____</p>	<p>Affix Passport size photograph duly signed by the candidate</p>
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1. Name of the Course

2. (a) Name of the Applicant (in Capital Letter) (b) Male / Female

3. Date of birth (as in Matriculation Certificate)
 (i) In figures: _____
 (ii) In words: _____

4. Details of Academic Qualifications:

Examination	Year of Passing	Institution & Board/Council/ University	Class	Subjects of Examination	Total Marks Secured	Full Marks
H.S.C./ Equivalent						
Higher Secondary Arts/Science/ Commerce						
Diploma in Engineering						
B.Sc./ BCA/ Others						
M.Sc./M.C.A./ B.E./ B.Tech./ A.M.I.E./ B-Level / Others						

(Strike out which ever is not applicable)

5. Mention the Code No. of the category to which you belong (Refer to serial No. 0.2 of the Information brochure for entering the category code)

6. Father's Name: _____

7. Guardian's Name: _____

8. Address in Capital Letters

(a) Present

(b) Permanent

Phone No.(Land Line):	Phone No.(Land Line):
Mobile No:	Mobile No:
E-mail:	E-mail:

9. Do you need hostel accommodation? Yes No 10. Mother Tongue _____

11. Nationality _____ 12. Religion _____

13. Whether employed? Yes No

If **yes**, mention the service particulars.

Name of the Organisation	Designation and the nature of the service	Date of Joining	Date of relieve (if any)

(Attach a certificate of no objection and service particulars from the employer)

14. Details of Bank Drafts/Banker's Cheque for Rs. 150/- and Rs.350/- enclosed:

Number with Date: (i) For Rs.150/- : _____ Date: _____
(ii) For Rs.350/-: _____ Date: _____

Issuing Bank: (i) _____
(ii) _____

15. Utkal University Registration No. (If any) _____

I declare that all the particulars given above in this application form are true to the best of my knowledge and I will not take admission in more than one course concurrently nor shall take up any job during the course.

Date: _____

Place: _____

(Full signature of the applicant)

**Undertaking by the Father/Guardian
(Only for applicants for admission into 5-year Integrated MCA)**

I _____ hereby undertake that the particulars stated above in the form by my son/daughter/ward _____ are true to best of my knowledge. I undertake that I shall be responsible for his/her conduct. Further, I shall pay regularly the course fees as per the rules of the university.

Date: _____

Place: _____

(Full signature of the Father/Guardian)

**OFFICE COPY OF THE ADMIT CARD FOR THE ENTRANCE TEST FOR ADMISSION INTO
M.Tech. (Comp. Sc.)/ M.Sc. (Comp. Sc.) / 5 Year Integrated MCA
2014-2015**

(Strike out whichever is not applicable)

Roll No. _____ Index No. _____

Name of the applicant in block letters (to be written by the applicant)

Date & Time of the Test : _____

Centre: _____

Full signature of the candidate _____

Course Co-ordinator

**Affix a passport
size attested
photograph**

**ADMIT CARD FOR THE ENTRANCE TEST FOR ADMISSION INTO
M.Tech. (Comp. Sc.)/ M.Sc. (Comp. Sc.) / 5year Integrated MCA
2014-2015**

(Strike out whichever is not applicable)

Roll No. _____ Index No. _____

Name of the applicant in block letters (to be written by the applicant)

Date & Time of the Test: _____

Centre: _____

Full signature of the candidate _____

Course Co-ordinator

**Affix a passport
size attested
photograph**

CHECK LIST

Put a tick mark (✓) against the item you have submitted the item along with the application form, otherwise put cross marks (X).

(Attach this page to the application form)

- | | | | |
|--|--------------------------|--|--------------------------|
| 1. Two Bank Drafts of Rs. 350/- and Rs. 150/-. | <input type="checkbox"/> | 2. Three passport size photographs affixed at appropriate space of the application form. | <input type="checkbox"/> |
|--|--------------------------|--|--------------------------|

Attested photocopies (of the items at Sl. 3 to Sl. 15)

- | | | | |
|--|--------------------------|---|--------------------------|
| 3. H.S.C. Exam. Mark Sheet | <input type="checkbox"/> | 4. H.S.C. Exam. Certificate | <input type="checkbox"/> |
| 5. Mark Sheet of +2/Diploma in Engg. | <input type="checkbox"/> | 6. Pass Certificate of +2/Diploma in Engg. | <input type="checkbox"/> |
| 7. B.Sc./BCA Mark Sheet | <input type="checkbox"/> | 8. Pass Certificate of B.Sc./BCA | <input type="checkbox"/> |
| 9. Mark sheet of M.Sc./MCA/BE/B.Tech./AMIE/B-Level Examination/Others | <input type="checkbox"/> | | <input type="checkbox"/> |
| 10. Pass Certificate of M.Sc./MCA/BE/B.Tech./AMIE/B-Level Examination/Others | <input type="checkbox"/> | | <input type="checkbox"/> |
| 11. SC/ST Certificate | <input type="checkbox"/> | 12. Sports/Games Certificate | <input type="checkbox"/> |
| 13. Ex-Serviceman/Serving Defence Personnel Certificate | <input type="checkbox"/> | 14. Physically Handicapped Certificate | <input type="checkbox"/> |
| 15. Admit Card in respect of qualifying Examination
<i>(If the result of the qualifying examination has not been published)</i> | <input type="checkbox"/> | | <input type="checkbox"/> |
| 16. No Objection Certificate from the Employer in Original
<i>(if the applicant is employed)</i> | <input type="checkbox"/> | | <input type="checkbox"/> |
| 17. Filled in Address Slips | <input type="checkbox"/> | 18. Self addressed envelope for index card. | <input type="checkbox"/> |

(Signature of the Candidate)

INDEX CARD

The undersigned acknowledges the receipt of your application form for admission into the **M.Tech. (Comp. Sc.)/ M.Sc. (Comp. Sc.) / 5-Yr. Integrated MCA** for the academic session **2014-2015**. You have been assigned the following Index Number.

Index Number: _____

You are required to quote this index number in all future correspondence regarding your admission.

Course Co-ordinator

ADDRESS SLIPS
(Fill in the present postal address in capital letters)

