

MANDATORY DISCLOSURE BY INSTITUTIONS RUNNING AICTE APPROVED MCA PROGRAMMES TO BE INCLUDED IN THEIR RESPECTIVE INFORMATION BROCHURE, DISPLAYED ON THEIR WEBSITE AND TO BE SUBMITTED TO AICTE EVERY YEAR LATEST BY 30th April TOGETHER WITH ITS URL.

The following information is to be given in the Information Brochure besides being hosted on the Institution's official Website.

“The information has been provided by the concerned institution and the onus of authenticity lies with the institution and not on AICTE”

I. NAME OF THE INSTITUTION

➤ Address including telephone, Fax, e-mail :

Dr. B. C. Roy Engineering College, Durgapur
Fuljhore, Jemua Road,
Durgapur – 713 206
Dist -: Burdwan
State-: West Bengal (India)
Telephone -: (91-343): 2501353, 2504106, 2503424, 2504121
Fax : 0343 – 2504059, 2503424
E-mail -: dgp_bcrec@sancharnet.in

II. NAME & ADDRESS OF THE PRINCIPAL

➤ Address including telephone, Fax, e-mail

Prof. (Dr.) D. Pal
Principal
Dr. B. C. Roy Engineering College, Durgapur
Fuljhore, Jemua Road,
Durgapur – 713 206
Dist -: Burdwan
State-: West Bengal (India)
Telephone -: (91-343): 2504121, 09635862575 (M)
Fax : 0343 – 2504059 / 2503424
E-mail -: principal@bcrec.org dgp_bcrec@sancharnet.in

III. NAME OF THE AFFILIATING UNIVERSITY

West Bengal University of Technology, Kolkata

GOVERNANCE

❖ Members of the Board and their brief background

Members of Board of Governors : Brief Profile

Chairman

Shir Rathin Roy, Hon'ble Mayor of Durgapur Municipal Corporation is the first citizen of this vast industrial metropolis by virtue of his post. He is a veteran political leader of the Burdwan District of West Bengal and commends respect of one and all.

BOG Members from Academia

Prof. (Dr.) Sajal Dasgupta, Director of Technical Education Govt. of West Bengal, Dr. S. Bhattacharya, Director, NIT, Durgapur, Dr. Goutam Biswas, Director, CMERI, Prof. A. K. Rakshit, Dept. of Bio-Technology, WBUT are all veteran educationists.

BOG members from Govt. and Industry.

Shri S. P. Gon Chowdhury, Managing Directory of West Bengal Green Energy Development Corporation Limited, Govt. of West Bengal, Shri V. Shyamsundar, MD – Durgapur Steel Plant, Mrs. S. Mahapatra, IAS, CEO/ADDA, Govt. of West Bengal, Shri A. K. Dubey, Chairman, Durgapur Projects' Ltd., Shri R. N. Lahiri, Principal Consultant, TCS are all veteran from Administration and Industry and have deep reputation in their respective fields of expertise.

The members of the Society are Philanthropic entrepreneurs with sufficient professional experience and exposure.

Secretary of the Society Shri D. Mitra has been associated with the promotion of computer education in Durgapur-Asansol Industrial belt for over three decades as a business partner of WEBEL – a Govt. of West Bengal Outfit. He is well conversant with the rules of the game as well as acumen to run an educational organizational. Excellent entrepreneurial skill is his forte.

Shri T. Bhattacharya, Treasurer, Shri J. Singh, Assistant Secretary, Shri R. Roy Chowdhury, Member and Shri N. Sikdar, Member have long exposures in the field of industry and commerce and have had business-related association with SAIL / DSP and other prime industries of this industrial belt for over three decades.

❖ Members of Academic Advisory Body

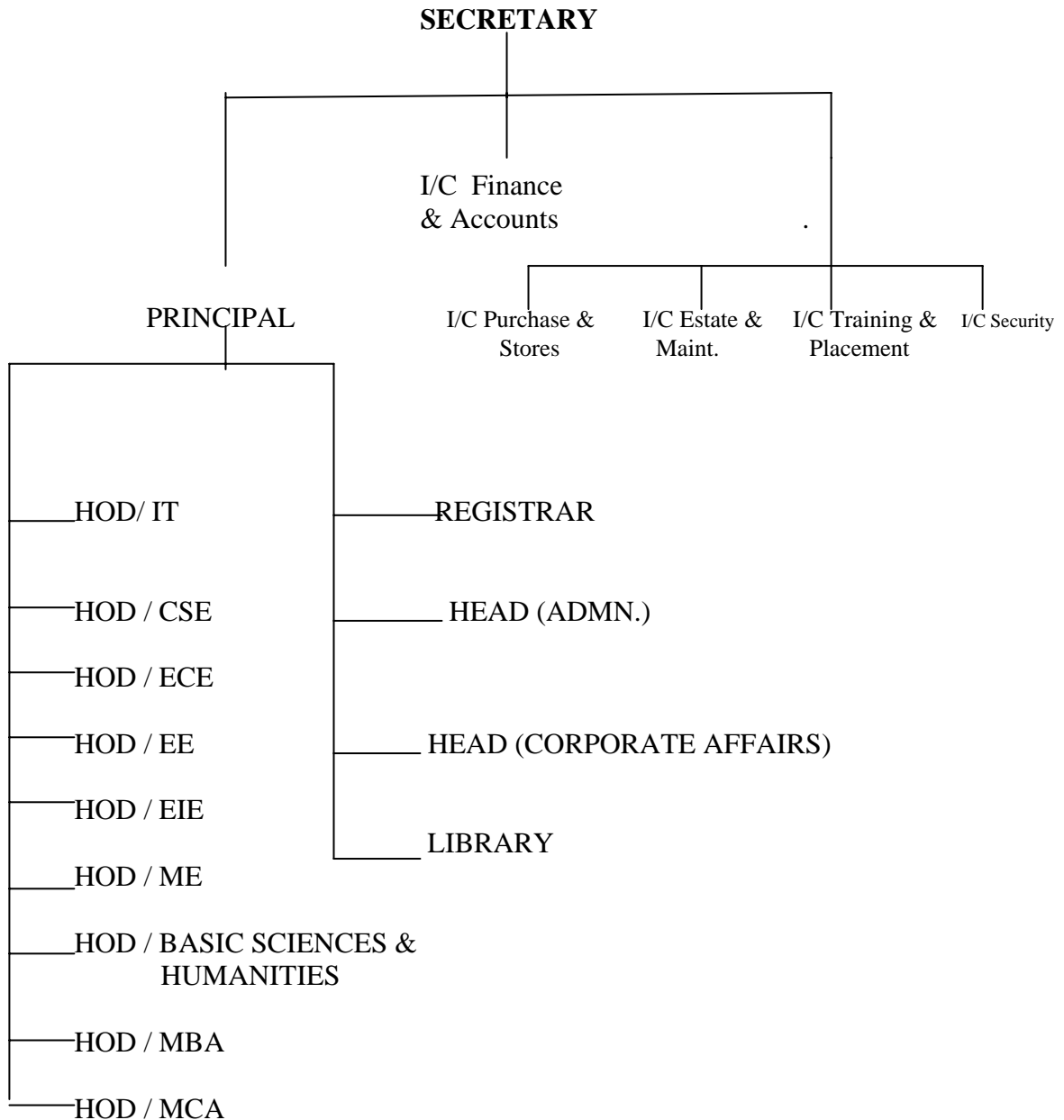
Academics Advisory Body consists of the following Members :

1. Principal / Director of the College
2. HOD - CSE & IT Dept. of the College
3. HOD - M.E. Dept. of the College
4. HOD - E.E. Dept. of the College
5. HOD - E.C.E. Dept of the College
6. Director of NIT - Durgapur

7. Director of Central Mechanical Engineering Research Institute - Durgapur

- ❖ Frequency of the Board Meetings and Academic Advisory Body : Three times in a year
- ❖ Organizational chart and processes

Organisational Chart



- ❖ Nature and Extent of involvement of faculty and students in academic affairs/ improvements:

Through designated Students Counselors and their regular meetings for exchange of opinion.

- ❖ Mechanism/Norms & Procedure for democratic/good Governance:

Bye Laws and Service Rules duly approved by Board of Governors are in force and being followed for governance in fruitful democratic manner.

- ❖ Student Feedback on Institutional Governance/faculty performance :

Students Feedback are received on faculty performance through well designed questionnaires and also their views about Institutional Governance is obtained through Suggestion Box and Student Counselors.

- ❖ Grievance redressal mechanism for faculty, staff and students:

Any grievance from faculty, staff and student is initially discussed at the respective Departmental committee for possible redressal. If required the grievance is further referred to Principal for discussion at the Grievance Redressal Committee meeting.

IV. PROGRAMMES

- ❖ Name of the Programmes approved by the AICTE –**Master of Computer Applications (MCA)**

- ❖ Name of the Programmes accredited by the AICTE - **N/A**

- ❖ For each Programme the following details are to be given:

- Name -: **Master of Computer Application**
- Number of Seats -: **60 (Sixty)**
- Duration -: **03 (Three) years (Six Semester Course)**
- Cut off mark / rank for admission during the last three years -:
Rank No. 2109 SESSION : 2007-08
Rank No. 3225 SESSION : 2008-09
Rank No 2009 SESSION : 2009-10
- Fee
 - ❑ **Tuition Fee – 50,000/- per year**
 - ❑ **Hostel fee – Rs. 36,400/- per year**
- Placement Facilities
 - ❑ **Managed by the Central Training & Placement Cell located at Kolkata and by the Training & Placement Cell at the College Campus**

- Campus placement in last three years with minimum salary, maximum salary and average salary

2008 PASSED OUT BATCH - 48%

2009 PASSING OUT BATCH - 49% (Process in going on)

- ❖ Name and duration of programme(s) having affiliation/collaboration with Foreign University(s)/Institution(s) and being run in the same Campus along with status of their AICTE approval. If there is foreign collaboration give the following details: **-NIL-**

V. FACULTY

- ❖ Branch wise list faculty member

- Permanent Faculty -: **12 (Twelve)**
- Visiting Faculty -: **-Nil-**
- Guest Faculty -: **- Need Based**
- Permanent Faculty: Student Ratio -: **1:15**

- ❖ Number of faculty employed and left during the last three years

- **Faculty Employed in MCA -: 13 (Thirteen)**
- **Faculty Left from MCA department – 1 (One)**

VI. PROFILE OF DIRECTOR/PRINCIPAL WITH QUALIFICATIONS, TOTAL EXPERIENCE, AGE AND DURATION OF EMPLOYMENT AT THE INSTITUTE CONCERNED

PRINCIPAL



Name : **Prof. (Dr.) D. Pal**

Date of Birth : 2/12/1961

Academic qualifications (with field of specialization) : Bachelor of Technology (EE, IIT Delhi)
Doctor of Philosophy (E & TCE, J.U.)

Details of Experience (Academic / Industrial) : i) Teaching : 11 Years
ii) Research : 25 Years

Date of the appointment in the present institution : 26.11.2008

Faculty Profile

Name of the Course	S.No	Name (s) of the Teaching Faculty	Designation (Lecturer/ Asst. Professor/ Professor)	Qualifications with field of specialization			Date of Birth	Experience a) Teaching b) Industry c) Research			PHOTO
				UG	PG	Doctorate		A	b	c	
M C A	1	Dr. Saurabh Dutta	Associate Professor and Head	B.Sc.	MCA	Ph.D.	6.6.73	10 Yrs	-	9 Yrs	
	2	Sri Debasis Guha	Senior Lecturer	B.Sc.	M.C.A., M.Tech. (OR) -	-	3.12.69	07 Yrs	-	-	
	3	Sri Surajit Dan	Senior Lecturer	B.Tech	M-Tech M.E.	-	5.1.79	7 Yrs	-	-	
	4	Sri Shyamapada Mukherjee	Senior Lecturer	B.E.	M.Tech.	-	13.1.80	3 ½ Yrs	-	-	
	5	Sri Ansuman Mahanty	Senior Lecturer	B.Sc.	M. Sc. MCA M. Tech. (Contd.)	-	1.4.76	07 ½ Yrs	-	-	
	6	Sri Joydeep Dutta	Senior Lecturer	B. Sc.	DOEAC C-B- Level (M.C.A.) M.E. (C.S.E.)	-	16.2.77	5 yrs	1 Yr.	-	
	7	Sri Pranam Paul	Lecturer	B. Sc.	MCA	Ph. D. (Thesis submitted)	6.1.80	3 ½ Yrs	-	3 Yrs	
	8	Sri Goutam Panigrahi	Lecturer	B. Sc.	MCA M.Tech (OR & BM)	-	21.11.77	3 yrs	3 yrs	-	
	9	Sri Pabitra Kumar Dey	Lecturer	B. Sc.	MCA M. Tech. (Contd.)	-	10.12.78	4 yrs	-	-	
	10	Sri Falguni Chakraborty	Lecturer	B.Sc.	MCA	-	1.12.79	5 Month	3 ½ Yrs	-	
	11	Ms. Rita Ganguly	Lecturer	BCA	MCA, M.Tech. (Contd.)	-	6.2.82	2 ½ Yrs	-	-	
	12	Sri Subhrangsu Chandra	Lecturer	BCA	MCA	-	31.1.82	1 yr	-	-	

Signature of Authorized Signatory with date

VII. FEE

- ❖ Details of fee, as approved by State fee Committee, for the Institution.

Fee Structure of the Institution

S.No.	Category	CET quota		Management quota	
		Fixed by the State Fee Committee	Being charged by the Institution	Fixed by the State Fee Committee	Being charged by the Institution
1.	Admission Fee	-	Rs. 3000 (one time)	NA	NA
2.	Tuition Fee	-	50000/- PA	NA	NA
3.	University fee (Examination fee, Registration fee etc.)	Exam - 1600 pa Reg. - 300 (one time)	Exam - 1600 pa Reg. - 300 (one time)	NA	NA
4.	Hostel fee (Rent etc.)	-	833 pm	NA	NA
5.	Laboratory fee	-	Nil	NA	NA
6.	Library fee	-	Nil	NA	NA
7.	Any other	-	Rs. 3600 pa.*	NA	NA
Total Fee					

Examination Fee (Yearly) - Rs. 1600.00, Registration Fee - Rs. 300.00 (One Time),

W.B.U.T. Development Fee - Rs. 1500.00 (one time)

*Learning Resource Centre - Rs. 2000.00 (Yearly) , College Annual Program - Rs. 1600.00 (Yearly),
Plus Mess Charge of Rs. 2400 PM

- ❖ Time schedule for payment of fee for the entire programme. : At the beginning of each semester i.e. **January and July every year**
- ❖ No. of Fee waivers granted with amount and name of students. : **NIL**
- ❖ Number of scholarship offered by the institute, duration and amount : **NIL**
- ❖ Criteria for fee waivers/scholarship. : **NIL**
- ❖ Estimated cost of Boarding and Lodging in Hostels. **36,400/- pa**

VIII. ADMISSION

- ❖ Number of seats sanctioned with the year of approval.

60 (Sixty) – 2005-06

60 (Sixty) – 2006-07

60 (Sixty) – 2007-08

60 (Sixty) – 2008-09

60 (Sixty) – 2009-10

- ❖ Number of students admitted under various categories each year in the last three years : **A) 40 nos. for the session 2005-06**
B) 60 nos. for the session 2006-07
C) 60 nos. for the session 2007-08
D) 60 nos. for the session 2008-09
E) 60 nos. for the session 2009-10
- ❖ Number of applications received during last two years for admission under Management Quota and number admitted : **N/A**

IX. ADMISSION PROCEDURE

- ❖ Mention the admission test being followed, name and address of the Test Agency and its URL (website) : **Through JECA examination. (www.csc-et.org)**
- ❖ Number of seats allotted to different Test Qualified candidates separately [AIMCET/CET (State conducted test/University tests)/Association conducted test] : **100% from JECA Entrance.**
- ❖ Calendar for admission against management/vacant seats: **N/A**
 - Last date for request for applications
 - Last date for submission of application
 - Dates for announcing final results
 - Release of admission list (main list and waiting list should be announced on the same day)
 - Date for acceptance by the candidate (time given should in no case be less than 15 days)
 - Last date for closing of admission
 - Starting of the Academic session :
 - The waiting list should be activated only on the expiry of date of main list
 - The policy of refund of the fee, in case of withdrawal, should be clearly notified.

X. CRITERIA AND WEIGHTAGES FOR ADMISSION: Through allotment from Central Selection Committee serially amongst rank holders of JECA qualified students

- ❖ Describe each criteria with its respective weightages i.e., Admission Test, marks in qualifying examination etc. : **N/A**
- ❖ Mention the minimum level of acceptance, if any,: **10+2 + 3 Passed with Mathematics subject and JECA qualified.**
- ❖ Mention the cut-off levels of percentage & percentile scores of the candidates who were admitted: **Rank = 2009**

XI. APPLICATION FORM

The downloadable form which is available in our college website with the URL and www.bcrec.org , the format is given below.



DR. B. C. ROY ENGINEERING COLLEGE, DURGAPUR



(Approved by AICTE & Affiliated to WBUT)
ISO 9001 : 2000 Certified

APPLICATION FORM FOR ADMISSION

SESSION : 20__ - 20__

Paste
Photograph
signed on the
front by
applicant

Name of the Course : **Master of Computer Application (MCA)** Duration : **3 Year (Full Time)**

01. Name of the candidate : _____
(IN BLOCK LETTERS)

02. Father's Name : _____

03. Mother's Name : _____

04. Address : _____

Pin Code _____ Phone No. : _____

Email _____

05. Date of Birth : _____ Age : _____

06. Sex : M/F SC / ST / OBC / GEN / PC Religion _____

07. Educational Qualification (10th Onwards) :

Exam. Passed	Year of Passing	Name of the Institution Board / University	% of Marks	Remarks

08. Score of JECA _____, JECA Enrollment No. _____

09. Professional Experience (if any) _____

10. Hostel facility required or not? Yes / No

I hereby, declare that the above information are true to the best of my knowledge, & I promise to follow the rules and regulations as stipulated by BCREC Authority

Date :

Place

(Signature of the Candidate)

N. B. : Xerox copy of testimonials are to be enclosed for serial no. 05, 07, 08.

XII. LIST OF APPLICANTS:

- ❖ List of candidates whose applications have been received along with percentile / percentage score for each of the qualifying examination in separate categories for open seats. List of candidates who have applied along with percentage and percentile score for Management quota seats. **N/A**

XIII. RESULTS OF ADMISSION UNDER MANAGEMENT SEATS/VACANT SEATS

- ❖ Composition of selection team for admission under Management Quota with the brief profiles of members (This information be made available in the public domain after the admission process is over) **N/A**
- ❖ Score of the individual candidates admitted arrange in order of merit: Maintained in the Institution. Management quota not applicable. **N/A**
- ❖ List of candidates who have been offered admission **N/A**
- ❖ Waiting list of the candidates in order of merit to be operative from the last date of joining of the first list candidates. **-N/A-**
- ❖ List of the candidates who joined with the date, vacancy position in each category before operation of waiting list. **-N/A-**

XIV. INFORMATION ON INFRASTRUTURE AND OTHER RESOURCES AVAILABLE

LIBRARY:

- Number of Library books/Title/Journals available (programme-wise) –

No. of Titles	No. of Volumes	No. of Journals
860	11907	20

- Central Library is housed in a sprawling **three storied** separate building.
- Rich collection of books.
- Addition of **large number** of books during each semester.
- A substantial collection of **CD-ROMs / DVDs** (over 2268 discs) relating to books, etc.
- **Subscription** to a good number of current journals (print version) both Indian (75) and foreign (9) including those published by ASME (American Society of Mechanical Engineers), ACM (Association for Computing Machinery, USA), SIAM (Society for Industrial and Applied Mathematics, USA) etc. Availability of access to 228 full text online international journals through participation in INDEST-AICTE Consortium and DELNET membership.
- Addition of **large number** of books during each semester.

- A substantial collection of **CD-ROMs / DVDs** (over 2146 discs) relating to books, etc.
- **Subscription** to a good number of current journals (print version) both Indian (75) and foreign (9) including those published by ASME (American Society of Mechanical Engineers), ACM (Association for Computing Machinery, USA), SIAM (Society for Industrial and Applied Mathematics, USA) etc. Availability of access to 228 full text online international journals through participation in INDEST-AICTE Consortium and DELNET membership.
- ✳ Central Library is housed in a sprawling **three storied** separate building.
- ✳ Rich collection of **Books**. [A departmentwise break-up of the holdings is given in the table below](#)
- ✳ Addition of **large number** of books during each semester.
- ✳ A substantial collection of **CD-ROMs / DVDs** (over 2146 discs) relating to books, etc.
- ✳ **Subscription** to a good number of current journals (print version) both Indian (72) and foreign (9) including those published by ASME (American Society of Mechanical Engineers), ACM (Association for Computing Machinery, USA), SIAM (Society for Industrial and Applied Mathematics, USA) etc. Availability of access to 228 full text online international journals through participation in **INDEST-AICTE** Consortium and **DELNET** membership.
- ✳ Subscribes to **three online bibliographic databases:**
 - i) **IEL Online**: The IEEE/IET Electronic Library provides unparalleled full text access to publications from IEEE/IET covering over **150 + full text journals** with back runs ranging from 20-50 years, **600 + conference proceedings** as well as IEEE standards-- over 1 million documents in all. Over **25,000 new pages** are added per month. Provides unique opportunity for **retrospective** and **current literature search**. A **veritable wealth of information** for B Tech, M Tech, MCA students as well as faculty members.
 - ii) **DEL (Digital Engineering Library/ McGraw-Hill's Access Engineering) Online** : Provides online access to full text literatures relating to 12 major areas of engineering with **more than 200 topics**. In fact this is an online database of reference books.
 - iii) **DELNET** : Provides online access, inter alia, to a select list of online full text foreign journals, full text US patent literature, union catalogue of books, journals, theses dissertations, etc.
- ✳ **Electronic Library**: With facilities for access to online and offline databases (CDs /DVDs, etc) and downloading of selected materials therefrom.

- ☀ **Book Bank** : Besides the Central Library, students can draw books from the Book Bank **for retention for the whole semester.**
- ☀ **Departmental Libraries** : Libraries attached to teaching departments serve to meet the requirements for quick reference to books by the faculty members and the students.
- ☀ Availability of **special collection of books**, journals, required for the competitive examinations (GATE, GRE, CAT, MAT, XAT, GMAT, SAT, TOEFL, IES, etc) to help the prospective aspirants hone their skills to face these examinations confidently.
- ☀ Accessibility to the book-collection of the Library by author, title, subject, etc through **OPAC (Online Public Access Catalogue)** on several computer terminals spread over the college building.
- ☀ Holdings of the library are **computerized and barcoded.**
- ☀ Uninterrupted **internet** connectivity including 1 mbps dedicated broadband line for Central Library
- ☀ **Document Delivery Service:** Arranging photocopies of articles from old learned periodicals to faculty members for R&D purposes.
- ☀ Provision of **reprographic** service.
- ☀ **Open Access System** : A unique feature of the Central Library providing its users free and seamless access to books, journals, e-resources, shelved in any corner of the Library.
- ☀ **Suggestions Register:** Both faculty members and students can put in suggestions for books for acquisition not available in the Library.
- ☀ Participation of students in the **book selection process** – a unique feature in this library.
- ☀ **The Epilogue** : Provision of all these facilities taken together enables a discerning user to **broaden and sharpen** his/her knowledge base.

LABORATORY:

For each Laboratory

➤ List of Major Equipment/Facilities

1. 60 nos. of computers of P-4 specifications connected with LAN/ WAN with internet facilities available
2. Printers – 2 nos. available
3. UPS of 6 KVA – One available

➤ List of some Experimental Setup

Laboratory Papers in First Semester MCA

MCA191 (Microprogramming & Architecture Lab)

1. Review of the different logic design circuits,
 - a) Flip/Flop(RS,JK,D,T), b) Register(4/8 bit Synchronized Data Transfer),
 - b) Tri-State Logic Gates.
2. Familiarity with state of art IC chips, e.g.
 - a) Multiplexer. b) Decoder c) counter. d) Counter e) Shift Register.
 - f) Adder.
Truth Table verification and clarification from Data-Book
3. Design a BCD Adder.
4. Design an Adder/Sub tractor composite unit.
5. Design a Carry Look Ahead Adder.
6. Design a Ripple Counter and Carry Look Ahead Counter and assess the complexity of both the circuits.
7. Use a Multiplexer unit to design a composite ALU.
8. Design a Keyboard encoder unit in two dimensions.
9. Design a Multiplexer display unit using counter, MUX, decoder etc.
10. Test a RAM chip and cascade two chips for vertical and horizontal expansion.
Use wired OR tristate output interconnection.
11. Use ALU chip for multi bit arithmetic operation.
12. Study of Microprocessor Kit (8085) and the execution procedure.
13. Study of different assemblers available?
14. Execution of the following Assembly language program using 8085 microprocessor kit and also using TASM/MASM/BASM:-
 - ❑ Performing Arithmetic operations on any two 8-bit numbers
 - ❑ BCD Addition program
 - ❑ Moving the data from one memory location to another
 - ❑ Rotating in all directions one bit at a time
 - ❑ Implementation of Stack operations for any POST-FIX expressions
 - ❑ Sorting (both) of data using any method
 - ❑ Implementing Booths Multiplication Algorithm
15. A case studies of Interfacings (Memory & I/O)?
16. Any Application side problem to be executed using 8085 assembly language program?

MCA193 (Programming Lab with C)

1. Simple Programs without using functions (in-built)
2. Implementation of functions
3. Solving Recursion problems (of all types)
4. Implementation of Arrays and Strings
5. Implementation of Pointers (e.g. sorting & searching problems)
6. Implementation of structures and unions by maintaining different databases like student mark sheet, Employee payroll etc.
7. Implementation of file handling
8. Basic usage of memory allocation (dynamically using arrays)

HU191 (Business Presentation & Language Lab)

1. Study of Windows (All types of Editions/Versions Available)
2. Study of tools of MS-OFFICE (2000) with basic objectives
3. Write the procedure for performing the mail - merge in MS-Word and implement it through some examples at least two from Business point of view.

4. Prepare a project report of any Automation Division of any company keeping in mind the following -:
5. Prepare a work sheet for maintaining the catalog of the Library also mentioning the year of purchase of the books and the quantities, prices and also show graphically the development in the library setup for the MCA department.
6. Prepare the Curriculum vitae of your classmates using mail – merge technique of Ms-word.
7. Prepare a slides for giving the presentation on the following topics -:
 - ❑ Latest Software & Hardware Trends in Computer Field
 - ❑ Objective of Call Centers in India
 - ❑ Any Business Oriented Presentation (Marketing, Training etc)
8. Prepare a database for maintaining the Alumni Association of your college for the students of MCA department using Ms-Access (as Back End tool).

Laboratory Papers in Second Semester MCA

MCA-293 (Data Structure Lab.)

1. Implementation of Arrays (Insertion, deletion, sorting, searching)
2. Implementation of Linked List (Creation, Deletion, Insertion, Sorting and Searching)
3. Implementation of Binary Tree (Creations and Traversals)
4. Implementation of Stack for solving the expressions
5. Implementation of Queue (Insertion and Deletion)
6. Study and Implementation of Various searching techniques
7. Study and implementation of various sorting techniques and computation of complexities

MCA-294 (Database Lab.)

1. Study of Various commands of PL/SQL
2. Table Creation and its description with insertion of records through PL/SQL.
3. Modification of existing records and the fields of the database table and its viewing
4. Implementation of Joining of tables and copying of records from other table
5. Study and implementation of meta characters, Aggregate Functions through PL/SQL.
6. Case Studies for handling various databases

MCA-295 (Object Oriented Programming Lab. With C++)

1. Problems on strings and pointers (Overview of C Language)
2. Implementation of inline function by using classes with access Specifiers.
3. Implementation of Constructor and Destructor
4. Implementation of friend and virtual function.
5. Implementation of inheritance (Single, multiple, multi-level, hierarchy and hybrid)
6. Problem solving on operator overloading
7. Implementation of file handling for various applications
8. Problem solving on exception handling by using try-catch-throw Statement.
9. Implementation of template function and classes.

Laboratory Papers in Third Semester MCA

MCA-392 (Unix Lab)

1. Study of different UNIX commands.
2. Study of Linux Environment with X windows.
3. Study of using different editors such as vi, ed, sed, emacs.
4. Concepts of Shell programming and its implementation through various examples
5. Study and Implementation of Process communication using standard functions of Linux / Unix.
6. Implementation of signal handling in Linux / Unix.
7. Implementation of file handling through various examples.
8. Study and implementation of Networking concepts by setting protocols

MM-391 (Statistics and Numerical Analysis Lab.)

1. Revision of C Language Programming with file handling and pointers
2. Study and implementation of Matrix – inversion method for solving linear equations
3. Study and Implementation of Newton – Raphson method
4. Study and implementation of Gauss – Elimination method
5. Study and implementation of Gauss – Seidel method
6. Study and implementation of Jacobi method
7. Study and implementation of Simpson methods
8. Study and implementation of Trapezoidal method
9. Study and implementation of Runge – Kutta method, Taylors and Eulers, Regula falsi method
10. Study and implementation of Newton Forward and Backward interpolation formulae.
11. Problems based on Statistical methods (like mean, mode, median, variance, standard deviation, etc)

MBA – 392 (Accounting Systems Lab.)

1. Study of Tally software in detail
2. Handling Accounting with Inventory control
3. Creation of different level of users
4. Creation of total accounting setup
5. Creating and editing of vouchers
6. Handling voucher entry in the mode of receipt, payment, sales, purchase, sales return, purchase return, debit note, credit note, journal, sales order processing, purchase order purchasing etc.
7. Reporting system of tally
8. Inventory valuation of methods using Tally
9. Creating Exception reports in Tally
10. Handling complicated transaction query
11. Implementation of Budgeting system in Tally
12. Creation and Implementation of Bank reconciliation reports.

COMPUTING FACILITIES: (In MCA Department)

- Number and Configuration of Systems : **100 of P-IV Specification**
- Total number of systems connected by LAN – **100%**
- Total number of systems connected by WAN – **100%**
- Internet bandwidth – Internet bandwidth : **1768 KBPS - 24 Hrs. (256 KBPS leased line from BSNL, 1 MBPS from SIFY and 512 KBPS from AIRTEL)**

- Major Software packages available – **All System & Application Software readily available.**
- Special purpose facilities available
 - Games and Sports Facilities – **Yes -**
 - Extra Curriculum Activities – **Yes -**
 - Soft Skill Development Facilities – **Yes -**
 - Number of Classrooms and size of each – **03 Two (70 Sq. m) (For MCA Department Exclusively)**
 - Number of Tutorial rooms and size of each **TWO (36 Sq m) each**
 - Number of laboratories and size of each- **03 65 Sq. m. each.**
 - Number of drawing halls and size of each – **N/A-**
 - Number of Computer Centres with capacity of each – **01**
 - Central Examination Facility, Number of rooms and capacity of each. – **Yes-**
 - Teaching Learning Process – **Yes-**
- Curricula and syllabi for each of the programmes as approved by the University

FIRST SEMESTER MCA

A. THEORY							
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS
			L	T	P	TOTAL	
1	MCA101	Computer Organisation & Architecture	3	1	-	4	4
2	MCA102	Business Systems and Applications	3	1	-	4	4
3	MCA103	Computer Programming with C	3	1	-	4	4
4	MM101	Discrete Mathematical Structure	3	1	-	4	4
5	HU101	Business English and Communication	3	1	-	4	4
Total of Theory						20	20
B. PRACTICAL							
6	MCA191	Micro Programming & Architecture Lab	-	-	4	4	3
7	MCA193	Programming lab (C)	-	-	4	4	3
8	HU191	Business presentation and language lab	-	-	4	4	3
Total of Practical						12	9
Total of Semester					32	29	

SECOND SEMESTER MCA

A. THEORY							
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS
			L	T	P	TOTAL	
1	MCA201	Data Communication & Computer Networks	3	1	-	4	4
2	MCA202	Information Systems Analysis & Design	3	1	-	4	4
3	MCA203	Data Structures with C	3	1	-	4	4
4	MCA204	Data Base Management System I	3	1	-	4	4
5	MCA205	Object-Oriented Programming With C++	3	1	-	4	4
Total of Theory						20	20
B. PRACTICAL							
6	MCA293	Data structure lab	-	-	4	4	3
7	MCA294	Database lab	-	-	4	4	3
8	MCA295	Object-Oriented Programming lab (C++)	-	-	4	4	3
Total of Practical						12	9
Total of Semester					32	29	

Third Semester MCA

A. THEORY							
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS
			L	T	P	TOTAL	
1	MCA301	Operating Systems and Systems Software	3	1	-	4	4
2	MCA302	Unix and Shell Programming	3	1	-	4	4
3	MCA303	<u>Intelligent Systems</u>	3	1	-	4	4
4	MM301	Statistics and Numerical Techniques	3	1	-	4	4
5	MBA301	Business Management	2	-	-	2	2
6	MBA302	Management Accounting	2	-	-	2	2
Total of Theory						20	20
B. PRACTICAL							
7	MCA392	Unix lab	-	-	4	4	3
8	MM 391	Statistics and Numerical Analysis lab	-	-	4	4	3
9	MBA392	Accounting Systems lab	-	-	4	4	3
Total of Practical						12	9
Total of Semester					32	29	

Fourth Semester MCA

A. THEORY							
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS
			L	T	P	TOTAL	
1	MCA401	Software Engineering & TQM	3	1	-	4	4
2	MCA402	Graphics & Multimedia	3	1	-	4	4
3	MCA403	Data Base Management System II	3	1	-	4	4
4	MM401	Operation Research & Optimization Techniques	3	1	-	4	4
5	HU401	Environment and Ecology	3	-	-	3	3
Total of Theory						19	19
B. PRACTICAL							
6	MCA491	Software Project Management lab	-	-	4	4	3
7	MCA492	Graphics & Multimedia Lab	-	-	4	4	3
8	MCA493	Advanced Database lab	-	-	4	4	3
Total of Practical						12	9
Total of Semester			31			28	

Fifth Semester MCA

A. THEORY							
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS
			L	T	P	TOTAL	
1	MCA E501/A/B/C	Elective 1	3	1	-	4	4
2	MCA E502/A/B	Elective 2	3	1	-	4	4
3	MCA E503/A/B	Elective 3	3	1	-	4	4
4	MCA E504/A/B	Elective 4	3	1	-	4	4
5	HU501	Values and Ethics of Profession	3	-	-	3	3
Total of Theory						19	19
B. PRACTICAL							
6	MCAE592/A/B	Elective 2 Lab	-	-	4	4	3
7	MCA591	Minor project and seminar	-	-	12	12	9
Total of Practical						16	12
Total of Semester			35			31	

Sixth Semester MCA

A. THEORY							
SL. NO.	CODE	THEORY	CONTACTS (PERIODS/WEEK)				CREDITS
			L	T	P	TOTAL	
			0	0	-	0	0
Total of Theory						0	0
B. PRACTICAL							
1	MCA691	Major project and seminar	-	-	36	36	29
Total of Practical						36	29
Total of Semester					36		29

Electives for Semesters 5

Elective No	Course Code	Topic
2	MCA E502A	System Administration and Linux
	MCA E502B	Windows Programming With VB
3	MCA E503A	Advanced Unix programming
	MCA E503B	Object Oriented Programming With Java
4	MCA E504A	Compiler Design
	MCA E504B	E-Commerce
1	MCA E501A	Distributed database management
	MCA E501B	Image Processing
	MCA E501C	Parallel Programming

- Academic Calendar of the University : Available in www.wbut.net
- Academic Time Table

First Semester (MCA)

Batch: 2009-2012 (New Batch)

**Routine for MCA 1st Semester- 2009
MCA Dept.**

	10:00 - 10:50	10:50 - 11:40	11:40 - 12:30	12:30 - 1:20	1:20 - 2:10	2:10 - 3:00	3:00 - 3:50	3:50 - 4:40	4:40 - 5:30
TUE	HU 191 (SDD/SD)		HU101 SD	MCA 102 SDN	B R E A K	MCA 193 FC			
WED	MM 101 DG	HU101 SL	MCA 101 GP	MCA 102 SDN		MCA 102 SD	MM 101 DG	MM 101 SM	
THU	MCA 101 GP		HU101 SDD / SD	MCA 102 SD		MCA 103 RG		MM 101 DG	
FRI	HU 191 (SL/SDD)		MCA 101 GP	MCA 101 PKD		MM 101 DG	MCA 103 RG	MCA 103 SD	
SAT	MM 101 SM	HU101 AD	MCA 103 RG	MCA 101 PKD		MCA 191 PKD / GP			

Third Semester (MCA)

Batch -: 2008-2011 (Existing Batch)

**Routine for MCA 3rd Semester- 2009
MCA Dept.**

	10:00 - 10:50	10:50 - 11:40	11:40 - 12:30	12:30 - 1:20	1:20 - 2:10	2:10 - 3:00	3:00 - 3:50	3:50 - 4:40	4:40 - 5:30
TUE	MCA 302 JD	MBA 302 MDG	MM 301 RG	MCA 301 AM	B R E A K	Group Discussion			
WED	MM 301 RG		MCA 303 SC	MCA 301 AM		MM 391 RG			
THU	MCA 302 JD		MBA 301 AB	MCA 301 AM		MBA 392 MDG			
FRI	MCA 303 SC	MM 301 RG	MBA 302 MDG	Group Discussion		MCA 392 JD			
SAT	MCA 301 AM	MCA 302 JD	MBA 301 AB	MCA 303 SC		MCA 303 SC			

Fifth Semester (MCA)

Batch -: 2007-2010 (Existing Batch)

**Routine for MCA 5th Semester- 2009
MCA Dept.**

	10:00 - 10:50	10:50 - 11:40	11:40 - 12:30	12:30 - 1:20	1:20 - 2:10	2:10 - 3:00	3:00 - 3:50	3:50 - 4:40
TUE	MCA E503B SD	MCA E502A / B BS / PP	MCA 591 (Minor Project Lab)		B	MCA E504A / B SM/GP		MCA (Minor Project)
WED	MCA E503B SD	HU 501 SS	MCA 591 (Minor Project Lab)		R	MCA E504A / B SM/GP	MCA 591 (Minor Project Discus)	
THU	MCA E592B PP				E	MCA E502A / B FC / PP	MCA E504A / B SM/GP	MCA I SD
FRI	MCA E503B SD		HU 501 SS	MCA E501A SDN	A	MCA E502A / B FC / PP	MCA E502A / B BS / PP	MCA (Minor Project)
SAT	MCA E501A SDN	HU 501 SS	MCA 591 (Minor Project Lab)		K	MCA E592A BS		

Teaching Load of each faculty (per week): **8 to 10 hrs. per week**

- Internal Continuous Evaluation System and place – **Yes**
- Students assessment of Faculty, System in place – **Yes**

AICTE MCA Mandetory Disclosure August 2009

**Dr. B. C. ROY ENGINEERING COLLEGE
DURGAPUR**



**AICTE
MANDATORY DISCLOSURE**

MCA

SESSION: 20010-11