

UNDERGRADUATE INFORMATION BROCHURE - A

Admission to Undergraduate Programmes – 2008

In

**Bachelor of Business Administration (BBA)
Bachelor of Computer Applications (BCA)
at Allahabad, Jaipur, Kolkata, Lalpur and Noida Campuses**

and

**Bachelor of Science - Animation & Multimedia (B.Sc. -A&M)
at Jaipur and Noida Campuses**



BIRLA INSTITUTE OF TECHNOLOGY

(University under section 3 of UGC Act 1956)

Mesra, Ranchi – 835215

Jharkhand, India

website: <http://www.bitmesra.ac.in>

This Information Brochure covers admission to:

Bachelor of Computer Application (BCA) & Bachelor of Business Administration (BBA)
at Allahabad, Jaipur, Kolkata, Lalpur and Noida Campuses

Bachelor of Science - Animation & Multimedia (B.Sc. -A&M)
at Jaipur and Noida Campuses

The Undergraduate Information Brochure –A with forms can be obtained from Mesra and other Campuses in India at the addresses given below.

Centre	Addresses and Contact details
Mesra	Dean Admissions, Birla Institute of Technology, Mesra, Ranchi 835215 Phone: PBX: 0651-2275444, 2276249 / 267 / 432 - Extn 469, & 2275868 (D) Fax: 0651-2275351, 2275401, 2276007, e-mail: admissions@bitmesra.ac.in
Allahabad	Director, Birla Institute of Technology , Allahabad Campus , B-7, Industrial Area, P.O. TSL Naini, Allahabad 211010 Phone: 0532– 2687363 / 2687099, Fax: 2687554 City Office: 14 Tagore Town, Allahabad 211002, Phone: 2465518 http://www.bitallahabad.ac.in , e-mail: bitallahabad@bitmesra.ac.in
Deoghar	Director, Birla Institute of Technology, Deoghar Campus , Panchayat Training Institute, Govt. of Jharkhand, Jasidih, At & P.O. Daburgram 814132, Dist. Deoghar, Jharkhand Phone: 9334654856, Telefax: 06432-237418, e-mail: bitdeoghar@bitmesra.ac.in
Jaipur	Director, Birla Institute of Technology , Jaipur Campus, 27, Malviya Industrial Area, Jaipur 302017 Phone: 0141– 4019798 /2751178, Fax: 2751601, e-mail: bitjaipur@bitmesra.ac.in
Kolkata	Director, Birla Institute of Technology, Kolkata Campus , Southend Conclave, 1582, Rajdanga Main Road, 4th Floor (On Gariahat - E M bypass Connector, opposite Siemens Building) Kolkata 700107, Phone: 033 – 24414542 / 24414556, Fax: 24414299 e-mail: bitkolkata@bitmesra.ac.in
Lalpur	Director, Birla Institute of Technology Lalpur Campus, Lalpur, Ranchi 834001, Phone: 0651–2531817 / 2531676, Fax: 2531658 / 2531676 http://www.biteclalpur.ac.in , e-mail: bitlalpur@bitmesra.ac.in
Noida	Director, Birla Institute of Technology , Noida Campus, A-7 Sector-1, Noida 201301 Phone: 0120 – 2543484 / 2553661 / 3662, Fax: 2554146 http://www.bitnoida.in , e-mail: bitnoida@bitmesra.ac.in
Patna	Director, Birla Institute of Technology, Patna Campus, Near Patna Airport, P.O. Bihar Veterinary College, Patna 800014 Phone: 0612- 2223545, 3200853, Fax: 2223545, e-mail: bitpatna@bitmesra.ac.in

For admission to academic programmes at our International Centres, please contact the concerned Centre directly at the Addresses and Contact Details given below

BITIC Bahrain http://www.bitic.edu.bh	Director, BITIC, P.O. Box 31320, Budaiya, Kingdom of Bahrain Phone: +973- 17690025, Fax: +973- 17692879, e-mail bitic@batelco.com.bh
BITEC Muscat http://waljatcolleges.edu.om	Director, BITEC, P.O. Box 131, Muscat, Sultanate of Oman Phone: +968- 24446660, 24449194, 24449155, 24446899 Fax: +968- 24449196/97, e-mail waljatcm@omantel.net.om info@waljatcolleges.edu.om , dean@waljatcolleges.edu.om
BITIC RAK UAE http://www.biticrak.ae http://rcast.org/bitcentre.htm	Director, BITIC, Knowledge Centre, RAK Free Trade Zone, P.O. Box 10141, Ras Al Khaimah, United Arab Emirates Phone: +971-7- 2274406, 2272203, 2274403; Fax: +971-7- 2284003, e-mail director@royalbit.ae

CONTENTS

- 1. Profile of the Birla Institute of Technology, Mesra, Ranchi**
- 2. Programmes offered at Birla Institute of Technology, Mesra and Other Campuses**
- 3. Profile of the BIT Campuses**
- 4. Eligibility and Selection Criteria for UG Programmes- BBA , BCA, & B.Sc. (A&M)**
- 5. Total Number and Distribution of Seats and Reservations**
- 6. Application Material for academic Programmes : How to apply**
- 7. Course Structure**
- 8. Financial Information and fees payable**
- 9. Discipline and General Rules**
- 10. Applicability of Regulations for the time being in force, Disclaimer and Legal Jurisdiction**
- 11. Expanding Horizons**

1. The Birla Institute Of Technology - a profile

The Birla Institute of Technology was founded by the philanthropist, industrialist Shri B.M. Birla and established in 1955 as a pioneering institution of technical education and research in the “Industrial Heart” of the country, with a vision to be recognized as a world-class learning institution for engineering and technology by providing the highest-quality academic programmes that foster student development and connect knowledge, practice, and outstanding scholarly research.

The achievements of the Institute, both in terms of research and excellent standards of academic programmes, led to its attaining the status of a Deemed University under Section 3 of the UGC Act of the Government of India, in 1986. The Institute attracts students from all over the nation and also from several foreign countries. It is a full member of the Association of Indian Universities, and is also a member of The Association of Commonwealth Universities. Its degrees and diplomas are recognized the world over.

Over the last fifty years, the Institute has not just kept pace with the times; it has often taken a lead in introduction of programs in emerging areas. The Institute today offers Undergraduate, Postgraduate as well as Doctoral level programmes in Engineering and Technology, Applied Sciences, Remote Sensing, Computer Applications, Information Science, Bio-Medical Instrumentation, Biotechnology, Pharmaceutical Sciences, Business Management, Hotel Management & Catering Technology. A rich heritage of academic excellence, a strong commitment towards creation and constant upgradation of academic infrastructure, an active interaction with industry, an unrelenting endeavour to develop effective teaching skills of its faculty and to provide an environment that promotes productive research, and most of all a stringent intake of the best talent have placed BIT amongst the frontrunners in the domain of technical education and research. With students drawn from all the States of our Country, the Institution has endeavoured to maintain its all India character.

In the 50 years since it was established the Institute has graduated more than 20,000 undergraduate and over 2,500 postgraduate students with various specializations in engineering, pharmaceutical science, applied sciences, computer applications, information science, information technology, biomedical instrumentation and management. The active research programmes of the Institute have produced a number of Ph.D.'s in engineering, pharmaceutical science, applied sciences, computer applications, information science and management.

The main campus of the Institute at Mesra is located 16 kilometers from Ranchi in a picturesque 780 acre setting at the confluence of the rivers Jhumar and Suvarnarekha. It is one of the most beautiful and well-maintained educational campuses in the country. The Mesra campus is entirely residential, providing accommodation to over 2700 undergraduate and postgraduate students and about 550 members of faculty and staff. The massive infrastructure also includes research laboratories, lecture halls, workshops, playground, gymnasium and a central library with over 1,00,000 books, journals and electronic databases.

The Institute has many “firsts” to its credit –

- It was the very first educational Institute in India to establish a Department of Space Engineering and Rocketry in the year 1964.
- The Institute set up a first Small Industries Entrepreneurs' Park (STEP) in the early 70's, becoming the first and the only Institute in the country to provide 'nursery sheds' and central designing and workshop facilities to young entrepreneurs, as well as to facilitate the initial project funding.
- It was one of the first Institutes in the country to start a MCA programme
- It was the very first technical University in India to establish an overseas Extension Centre – at Bahrain, in the year 2000.
- The Institute was one of 11 Institutes and Universities in India to be given the PARAM 10000 super computer from C-DAC, Pune.

The Institute has collaborative arrangements with Universities in the USA, UK, Europe, Canada and China. It is an active member of the EAGER NETWIC Project of ASIA LINK programme of European Commission for establishing a world-class academic network of higher education in the wireless and mobile communication between the five partner Universities.

The alumni, many of whom are amongst the leaders of Industry both in India and abroad, in major sectors of the economy, have made the Institute proud of their achievements. The Institute along with its BIT Campuses has at present more than 7500 students enrolled for different Undergraduate and Postgraduate Programmes. It also has more than 150 students registered for the Ph.D. Programmes. The Institute offers the following undergraduate and postgraduate programmes at its Main Campus at Mesra:

2. Programmes offered at Birla Institute of Technology, Mesra and its other Campuses

The Institute offers following programmes at Mesra and its other Campuses at Allahabad, Deoghar, Jaipur, Kolkata, Lalpur, Noida and Patna:

Campus Name	Undergraduate Programmes	Postgraduate Programmes
Mesra	<ol style="list-style-type: none"> 1. Bachelor of Engineering (B.E.) in the following disciplines: <ol style="list-style-type: none"> a) Biotechnology b) Civil Engineering c) Computer Science d) Electrical & Electronics Engineering e) Electronics & Communication Engineering f) Information Technology g) Mechanical Engineering h) Polymer Engineering i) Production Engineering 2. Bachelor of Architecture (B. Arch) 3. Bachelor of Pharmacy (B. Pharmacy) 4. Bachelor of Hotel Management and Catering Technology (BHMCT) 	<ol style="list-style-type: none"> 1. M. E. <ol style="list-style-type: none"> a) Automated Manufacturing Systems b) Computer Aided Analysis and Design - CAAD c) Civil Engineering d) Electrical Engineering e) Electronics & Communication Engineering f) Mechanical Engineering g) Quality Engineering & Management h) Polymer Engineering i) Software Engineering j) Space Engineering & Rocketry 2. M. Pharm <ol style="list-style-type: none"> a) Pharmaceutical Chemistry b) Pharmaceutics c) Pharmacology d) Pharmacognosy 3. M. Tech <ol style="list-style-type: none"> a) Computer Science b) Environmental Science & Engineering c) Fuels and Combustion d) New Materials & Processing Technology e) Scientific Computing f) Remote Sensing 4. MUP - Master of Urban Planning (Town Planning) 5.M.Sc. <ol style="list-style-type: none"> a) Bio-Informatics b) Bio-Medical Instrumentation c) Geo-Informatics d) Information Science 6. MBA - Master of Business Administration 7. MCA - Master of Computer Applications

Allahabad	<ol style="list-style-type: none"> 1. Bachelor of Business Administration (BBA) 2. Bachelor of Computer Applications (BCA) 3. B. Tech (Part-time) in Civil, Mechanical, and Electrical & Electronics Engineering 	1. MCA - Master of Computer Applications
Deoghar	<p>Bachelor of Engineering (B. E.) in the following disciplines:</p> <ol style="list-style-type: none"> a) Computer Science b) Electrical & Electronics Engineering c) Electronics & Communication Engineering d) Mechanical Engineering e) Production Engineering 	
Jaipur	<ol style="list-style-type: none"> 1. Bachelor of Engineering (B.E.) in the following disciplines: <ol style="list-style-type: none"> a) Computer Science b) Electronics & Communication Engineering 2. Bachelor of Business Administration (BBA) 3. Bachelor of Computer Applications (BCA) 4. B. SC. Animation & Multimedia (B.SC.- A & M) 	<ol style="list-style-type: none"> 1. MBA - Master of Business Administration 2. MCA-Master of Computer Applications 3. .M.Sc.- Geo-Informatics
Kolkata	<ol style="list-style-type: none"> 1. Bachelor of Business Administration (BBA) 2. Bachelor of Computer Applications (BCA) 	<ol style="list-style-type: none"> 1..M.Sc. <ol style="list-style-type: none"> a) Bio-Informatics b) Geo-Informatics 2. MCA - Master of Computer Applications
Lalpur	<ol style="list-style-type: none"> 1. Bachelor of Business Administration (BBA) 2. Bachelor of Computer Applications (BCA) 	1. M.Sc. in Information Technology for girls only
Noida	<ol style="list-style-type: none"> 1. Bachelor of Business Administration (BBA) 2. Bachelor of Computer Applications (BCA) 3. B.Sc.- Animation & Multimedia (B.Sc.- A & M) 	<ol style="list-style-type: none"> 1. MBA - Master of Business Administration 2. MCA - Master of Computer Applications
Patna	<p>Bachelor of Engineering (B.E.) in the following disciplines:</p> <ol style="list-style-type: none"> a) Civil Engineering b) Computer Science c) Electrical & Electronics Engineering d) Electronics & Communication Engineering e) Information Technology f) Mechanical Engineering g) Production Engineering 	

3. Profiles of the BIT Campuses

Allahabad Campus

BIT Allahabad Campus was established in January 1998. The Courses being offered currently are MCA, BCA, BBA and B.Tech (part-time) programmes in Civil, Mechanical and Electrical & Electronics Engineering. The Library has a large number of books and technical journals. A digital library for on-line access of books and journals has also been provided for staff and students.

The Department of Civil Engineering has a Geotechnical laboratory, Surveying Laboratory and Civil Engineering Materials testing Laboratory. Students work on projects on irrigation, rural water-supply schemes, rural link roads and environmental pollution, etc. The Department of Electrical & Electronics Engineering has an Electrical Machines Laboratory, Digital Electronics Laboratory, Microprocessor Laboratory and Control Engineering Laboratory equipped with MATLAB software. Students have done projects on high voltage transmission, modern communication system, energy saving devices, etc. The Department of Mechanical Engineering has a Manufacturing Processes Laboratory, I.c. Engines Laboratory and Non-Conventional Energy Laboratory. Students have done projects on non-conventional energy, improvement of engine performance, pollution control, CAD, etc.

The Centre encourages students to organize co-curricular and extra-curricular activities and competitions in games and sports, quizzes, debates, essay competition, painting and photography at periodic intervals. The Faculty of the Centre actively interacts with industry and provides consultancy to them. This interaction also provides students an opportunity to work on industrial problems and get the feel of an altogether different work environment.

The Computer Science Department has spacious and well-equipped laboratories with a large number of HP P-D, IBM P4, DELL P4, Compaq P4 and Compaq Celeron computer systems, a Compaq Proliant Server, DELL, PowerEdge Servers, a Unix Server and VT 100 terminals, with various operating systems and other software. All systems are networked and the Department has 2 Mbps broadband connection for internet access. The students do project work on networking, web design, multimedia applications, internet controlling tools, image processing, e-security, artificial intelligence, etc. The Department has established links with neighboring IT industries and has arranged industrial visits and lectures by experts from the industries. Students have undergone training in organizations such as Alcatel, Areva, Bharat Electronics, Birlasoft, CESE Ltd., CTS, Hp, Infosys, IEL, Perot Systems, QuantTechnologies, Tata Technologies Ltd., TCS, Tata Motors and Zensar. Graduates hold positions in Airtel, Accenture, Birlasoft, CTS, Pfizer, HP, HCL, IBM, John Hopkins, Patni, Satyam, TCS, Transworld, Zensar, Wipro, etc. The Placement cell assists students in development of their personality and enhancement of their communication skill.

The Department of Management conducts the BBA Programme and also look after the Management courses for other departments.

Programmes Offered:

Undergraduate BBA, BCA, B.Tech (part-time) in Civil, Mechanical and Electrical & Electronics Engineering Postgraduate MCA

Jaipur Campus

BIT Jaipur campus was established in 1995 in the sprawling campus of the reputed Birla Institute of Scientific Research (BISR) that is well known for its contribution in the field of applied science and entrepreneur development programme since its inception in 1955. The focus of the institute is to provide quality education in Engineering, Applied Sciences and Management with technology and professional exposure through innovative programmes.

The Centre caters to the growing need of skilled & quality professionals through the pursuit of knowledge in the field of Education, Research, Consultancy and Training. The institute equips the students with necessary know how to face the competitive scenario in their professional career. Driven by the mission that technology will be the gateway to the future, it is today one of the leading technical institutes of Rajasthan.

Academic & Other Activities

To meet requirement of practical training and professional exposure to students, the institution arranges project work and summer training in reputed industries. The internal seminars are regularly conducted in the campus auditorium. The purpose is to give the students an adequate environment where they can learn subject analysis, presentation skills and interaction with audience.

Seminar presentations are conducted from time to time. Eminent experts from emerging technology areas are invited to deliver lectures on the latest developments and technologies. Such events open a world of knowledge to the students. Besides these, institution also conducts national and international level seminars/conferences/workshop to give its faculty and students an exposure to new developments in the emerging technologies and trends.

For the overall personality development, extra-curricular activities are given due importance along with academic activities. The students organize the activities and as a result, improve their own leadership and organizing skills. Cultural events, sports, quizzes and debates are organized under the supervision of experts.

A Glance to Various Departments

1. Computer Science Department

The courses covered under this department are BE in Computer Science, MCA and BCA.

The department of Computer Science incorporates the latest guidelines from the professional engineering world. Computer science is concerned with the study of the hardware, software, and theoretical aspects of high-speed computing devices and with the application of these devices to scientific, technological, and business problems. The degree program draws from classroom, laboratory, and engineering work experiences, using the rich resources of the university, faculty, and professional engineering community to prepare students for today's world of competitiveness and innovation.

The emerging areas where the department is putting thrust are – computing and applications, optimization and control based software, mobile application development, high level multilingual search, adaptive and self organized compilers etc. The department has eight high-tech computer laboratories having over 400 machines of IBM, Compaq, Dell and HP connected to latest state of the art servers. Other laboratories are also been set up, on Unix and CAD and simulations. With the objective of giving the students the best exposure, the Department has the latest versions of all required software such as Oracle, Developer, MS SQL Server, C++, JAVA, Visual Basic, MS Office, Adobe PhotoShop, C, Cobol, etc, and UNIX, Windows NT and Windows OS platforms. The course curriculum and the hardware are constantly updated to keep pace with the fast changes in technology.

2. Electronics & Communication Engineering Department

The course covered under this department is BE in Electronics & Communication Engineering.

Electronics now days involve in all disciplines of engineering, it provides basic hardware support to Computer Science, basic control and display systems to all kind of instruments and mechanical and electrical machines. When it combines with communication, it brings miracle technologies in wireline and wireless connectivity and networking like; Satellite Communication, Mobile Communication, Optical Communication, Broad Band SDH & ADSL, Internet and Intranet, Wireless in Local Loop (WLL), Bluetooth, etc. In nut shell, the advancement in the Electronics & Communication Engineering has played vital role in realization of the concept of '**Global Village**'.

The Department of Electronics & Communication Engineering in the institution conforms to the global scenario with its knowledge base, experience and infrastructure. The department has learned teaching faculty qualified at M.Tech and Ph.D. Levels. It has excellent lab infrastructure in the area of Basic Electronics, Control System & Instrumentation, Integrated Electronics, Analog & Digital Circuits, Semiconductor & Microelectronics, VLSI, DSP, Micro-controller & Microprocessor, Analog & Digital Communication, Optical Communication, Microwaves and Antenna. To give students exposure to software based designing, the department has well equipped simulation lab having software simulation tools like MATLAB, MULTISIM, COMSIM, Code Composer Studio for DSP, Xilinx's ISE Foundation for VLSI design, etc.

The department ensures that the students graduated from here are well conversant with the conceptual knowledge, hand on and software based design skills and technology adaptation. The department is looking forward to enhance core skill set through research and development in the emerging technologies like; Communication Systems, Software Defined Radio, VLSI, Microwave & Milimeter Wave Circuits, Optical Networks, Microstrip Antennas, Virtual Reality, etc.

3. Management Department

The fast development in corporate sector and other business enterprises has been defining the importance of management education to sustain the organization and attain growth in a highly competitive environment.

Matching to the new trends of professionalism in all business practices, the management department of the institution offers specializations in the field of Marketing, Finance, Information Technology (IT) and Human Resource Management. The department has learned teaching faculty qualified at Postgraduate and Ph.D. Levels in Management discipline.

The department is looking forward to enhance its core strength to enter into new knowledge area related to emerging trends like; retail sector, service sector, foreign trade, technology management, etc. Understanding the requirement of an additional skill set of communication skills, leadership quality, crisis management, language proficiency, etc, the department organizes regular personality development & training programmes, seminars and corporate visits.

4. Animation and Multimedia Department

The course covered under this department is three years B.Sc. degree in Animation and Multimedia. Due to new mind set of people in the environment of globalization, the entertainment industry, particularly film and television, has been witnessing high growth, technology intervention and experimentation. **Animation & Multimedia** is the area that contains all these main aspects. The beauty of this segment lies in conveying the message in a very interesting and simple way.

The department has skilled and learned teaching staff having academic and industrial experience. The department has excellent lab infrastructure for fine arts, 2D & 3D Animation, acting and well-equipped computer systems for multimedia application. The department has specialized soft wares like ; MAYA, COMBUSTION, 3DS-MAX, Toon Boom Studio, Adobe Suite, etc.

Campus Placement Cell

The campus has a placement cell to guide students about their career plan, to train them and to facilitate their placement in reputed organizations. The expert faculty members having vast experience in the area of high learning and industry; the excellent relationship with of prospective employers and an intelligent mechanism of analysis of student's interest, strength, weakness, training needs, etc. are the highlighting features of the placement cell. The focus of the placement cell is to train and equip students in such a way that they are gladly accepted by the best organizations & industry. The cell operates in close guidance of the placement division of our main campus at Mesra, Ranchi.

Courses Offered

Undergraduate: B.E. in two branches of Engineering :
 i) Computer Science (CS)
 ii) Electronics and Communication Engineering (ECE)
 BBA , BCA & B.Sc. (Animation & Multimedia)

Postgraduate: MBA , MCA & M.Sc. in Geo-informatics

Kolkata Campus

BIT Kolkata Campus was established in 1995. This Centre offers academic programmes in Computer applications and Business Management. The Centre has modern computer laboratories, a well-equipped library and other academic infrastructure. The Centre, located in the southern part of the city, is well connected with the rest of Kolkata. The extensive 21, 000 sq feet premises of the Centre includes a spacious computer laboratory with a server room, several lecture rooms, a seminar hall, and a well-equipped library with books, journals and an e-library. Students have free access to online journals through ACM, IEEE and Emerald-online. The whole Centre is networked and internet facilities are provided through a 128 kbps leased line.

The computer laboratory has 110 modern HP and Dell PC's, and 30 Compaq machines. The Centre will soon offer professional multimedia courses, for which the Dell PC's are specially configured. The latest software ranges from C, Turbo C++, Java, Visual Studio.net, etc, to Oracle 9i, Photoshop 9, Adobe Writer, Flash 8, Dreamweaver 8 and Rational. Rose. Platforms include Windows 2000, Windows 2003 Server, Windows Workstation version, Red Hat Linux 4, etc.

All students of last batch of MCA secured campus placements in reputed organizations such as Birlasoft, IBM Global, Accenture, Flextronics (HSS), Mahindra British Telecom, Wipro and Metalogic Systems. These students had done their final semester projects in CTS, WIPRO, ISI Calcutta, Jadavpur University, Electra Design automation, IBM Global, Sunrise Software, Flextronics (HSS), Birlasoft, and Metalogic Systems. They had done projects on different platforms like R&D, Networking, Image Processing, VLSI design, Database software. All students are also encouraged to do inhouse projects in their fifth/sixth semester under the guidance of the faculty members. They have also presented seminars in fifth semester.

The faculty at the Centre has a range of teaching, research and industry experience in Digital Image Processing, Mobile Computing, Distributed and Parallel Computing, Agile Programming, Data Warehousing and Mining, Industrial Marketing, Corporate Finance, HR and Organizational Behaviour, Entrepreneurship, and Industrial Relations. Many of them are also actively involved in training and development programmes as well as consultancy for different and public sector organizations. Guest lectures are also delivered regularly by eminent faculty from IIT Kharagpur, Jadavpur University, Burdwan University, B.E. College (Shibpur), etc.

The BIT Kolkata Centre was a co-sponsor of the 151 International Conference On Information Systems Security (ICiSS 2005) held in December 2005, jointly with the Centre For Distributed Computing at Jadavpur University. The Centre was also one of the major technical sponsors, along with the IEEE and IEE, of the International Conference on Emerging Applications of IT (EAIT 2006) held at Kolkata from February 10 to 11, 2006. The conference was organized by the Computer Society of India, Kolkata Chapter

Programmes currently offered:

Undergraduate: BBA, BCA

Postgraduate: MCA, M.Sc. Bio-Informatics, M.Sc. Geo-Informatics

Lalpur Campus , Ranchi

The Institute first started a Centre for Continuing Education at Lalpur in Ranchi, initially with part-time postgraduate M.E. courses in the disciplines of Mechanical, Civil, Electrical and Electronics Engineering, for the benefit of officers working in various Ranchi based Public Sector Undertakings and private industries such as, MECON, RDCIS-SAIL, HEC, Coal India Limited, CEMPDIL, Shriram Ball-bearings Limited, Usha Martin Industries Limited, nationalized banks, etc, who wished to upgrade their qualifications. Part-time evening courses were offered for first the M.E. then subsequently the MBA, MCA, and DCA courses, with laboratory classes being conducted on Sundays and holidays at the Mesra campus. This Centre is now named as BIT Lalpur Campus.

In 1997 the Institute started the full time courses, B.Sc. Computer Science and B. Sc. Electronics for girls, and in 1998 the BCA course, again for girls only. The fact that these were extremely successful led in 1999 to extra shifts being added to run the BCA course for boys also. The M.Sc. Information Technology and M.Sc. Electronics and Telecommunication courses for girls and BBA course for girls and boys (in separate shifts) were introduced in 1999.

The Centre has well equipped computer laboratories and library facilities. Currently the Lalpur Centre has over 1600 students on its rolls, of which almost 500 are postgraduate students. Students of the Centre organize their own cultural and extra-curricular events, and also take active part in sports and cultural events organized at Mesra, such as Athletic Meets, BITOTSAV (the annual Institute Festival) and SAMAAGAM, (the Annual All India Management Schools' Festival organized by students of Management Department at Mesra).

Campus placements: Final year students participate in campus placement at the main campus at Mesra, and secure excellent placements.

Programmes currently offered:

Undergraduate: BBA, BCA

Postgraduate: MBA, MCA, M. Sc. (IT)

Doctoral : Ph.D.

Part-time Programmes currently offered:

MBA, MCA, M. Tech (Computer Science)

Noida Campus

BIT Noida Campus was started in 1998 with the BCA course. Since then, the Centre has seen a vast growth in various programmes at all levels. The courses being offered currently are MCA, MBA, BCA, BBA and B.Sc. in Animation & Multimedia. The Centre now also registers scholars for PhD. programmes in Management & Computer Science. The Centre has a strong core faculty in all related subjects. It has a location advantage to engage guest faculty from industry and other institutions for specialized lectures. The location is a gateway to a large number of IT companies and other major corporates in the NCR. The Noida Centre currently has 820 students on its rolls, of which 300 are postgraduate students.

The Noida Centre was the first institute in India to set up a full fledged degree course in B.5c (Animation & Multimedia). The Centre has well equipped computer laboratories with an animation & multimedia laboratory and studio, and an internet laboratory. All the laboratories, departments and sections are connected in LAN, and Wi-Fi facility has been added in 2006-2007. The Centre has an excellent library and subscribes to journals.

The Centre occupies all floors of a four-storied building, with each floor allotted different courses. The centre has an auditorium to accommodate about 300 persons, for seminars, workshops and other activities. There is also a spacious cafeteria for students and staff. A lift has been provided for staff, visitors and handicapped students. The Centre has organized various seminars, workshops and guest lectures for all round development and learning of the students

As a part of "student-industry interface" programmes, students attend sessions with eminent personalities from industry to improve their thought processes and help them build a positive attitude towards life. The students organize their own sports, cultural and other extracurricular events, and also take active part in cultural events, sports and technical festivals organized at the main campus at Mesra.

Campus placements: The Placement Cell of the Centre actively assists students in securing jobs in leading companies. Final year students also participate in campus placement at the Mesra, and have secured excellent placements in major renowned organizations, such as Xansa, Tata Motors, Tata Consultancy Services, DCM, Economic Times, HLL, Crompton Greaves etc.

Programmes currently offered:

Undergraduate: BBA, BCA, B.Sc. (Animation & Multimedia)

Postgraduate: MCA and MBA , Ph.D. Management, Computer Science

Patna Campus

BIT Patna Campus was established in 2006, on the request of the Government of Bihar. A Memorandum of Understanding was signed between the Institute and the Government of Bihar in December 2005. Subsequently, the Government of Bihar allotted 25 acres of land located between the Bihar Veterinary College and the Jai Prakash Narayan International Airport at Patna and also agreed to release the requisite funds for establishing the Centre. The Foundation Stone of the Centre was laid on 24 December 2005 and construction started in April 2006.

The academic activities at the Patna Centre commenced in September 2006 with admission to the B.E. programmes in Computer Science, Electronics & Communication Engineering and Electrical & Electronics Engineering, with an intake of 40 students in each of these disciplines.

In the academic session 2007-08, the intake at the Patna Centre was increased to 300 as per the provisions of the above MoU, and admission has been through AIEEE- 2007 and central counselling conducted by the Central Counselling Board.

Patna Centre currently offers the B.E. programmes in the disciplines of:

1. Civil Engineering
2. Computer Science
3. Electronics & Communication Engineering
4. Electrical & Electronics Engineering
5. Information Technology
6. Mechanical Engineering
7. Production Engineering

The Patna Centre is entirely residential, and all students reside in hostels on the campus. Each hostel has a spacious dining hall, and all students must eat in their respective hostel messes. The mess charges are approximately Rs. 1,700 per month. The infrastructure includes laboratories, lecture halls, workshops, playgrounds, gymnasium and a library. The plans for the Centre include construction of 5.25 lakhs square feet of academic space, adequate hostel accommodation for 1200 students and residential facilities for staff, dispensary, playground, gym and guest house.

Facilities for extra-curricular activities are being developed at Patna Centre, to provide platforms for students to nurture their hobbies and other creative talents for relaxation and entertainment.

4. Eligibility and Selection Criteria for B.B.A., B.C.A., and B.Sc. (A&M)

Age Limit : The maximum age limit for admission to all undergraduate programmes is 21 years (26 years for SC/ST candidates) as on 1st October , 2008

S.No	Programme	Campus	Eligibility Criteria	Selection Procedure
1	BBA	Allahabad, Jaipur, Kolkata, Lalpur and Noida	<p>a) Pass in Class 10 with minimum aggregate 60% (50% for SC/ST) counting all required subjects.</p> <p>b) The candidate must have passed in English in Class 12/Equivalent Qualifying Examination (QE)</p> <p>c) Pass in Class 12/Equivalent Qualifying Examination (QE) and with minimum aggregate 70% (50% for SC/ST) counting all required subjects for Lalpur Campus</p> <p>d) Pass in Class 12/Equivalent Qualifying Examination (QE) and with minimum aggregate 60% (50% for SC/ST) counting all required subjects for Allahabad, Jaipur, Kolkata and Noida Campuses</p>	Admission will be only on merit determined by the aggregate percentage marks obtained in the required subjects in Class 12/QE
2.	BCA	Allahabad, Jaipur, Kolkata, Lalpur and Noida	<p>a) Pass in Class 10 with minimum aggregate 60% (50% for SC/ST) counting all required subjects.</p> <p>b) The applicant must have passed in Mathematics/ Computer Science/ Information Practices or Equivalent as one of the subject in class 12 or Equivalent QE</p> <p>c) Pass in Class 12/Equivalent Qualifying Examination (QE) and with minimum aggregate 70% (50% for SC/ST) counting all required subjects for Lalpur Campus</p> <p>d) Pass in Class 12/Equivalent Qualifying Examination (QE) and with minimum aggregate 60% (50% for SC/ST) counting all required subjects for Allahabad, Jaipur, Kolkata and Noida Campuses</p>	Admission will be only on merit determined by the aggregate percentage marks obtained in the required subjects in Class 12/QE

S.No	Programme	Campus	Eligibility Criteria	Selection Procedure
3.	B.Sc. (A&M)	Jaipur and Noida	<p>a) Pass in Class 10 with minimum aggregate 60% (50% for SC/ST) counting all required subjects.</p> <p>b) Pass in Class 12/QE with minimum aggregate of 50% (45% for SC/ST) in all required subjects, as candidates will be largely selected on the basis of creativity aptitude test.</p>	<p>Admission to the course will be on the basis of merit rank determined by the aggregate percentage marks obtained in the required subjects in Class 12/QE & the performance in the Creativity Aptitude Test. Both of these have equal weightage (50-50 %)</p> <p>The Creativity Aptitude Test to be held at Noida and Jaipur campuses only, viz. at the choice of "Place for Study".</p>
4.	<i>*All above programmes for NRI students and self Financing Foreign Students(SFFS)</i>	<i>Mesra and other campuses</i>	<p>a) <i>For each programme, candidates must fulfill the CMEC and other criteria given above for given programme of interest</i></p> <p>b) <i>Candidates must be Son or Daughter of an NRI / a PIO / or foreign national, and must have obtained prescribed qualification from a School / College located abroad, or</i></p> <p>c) <i>Candidate must have stayed abroad for at least five years during the preceding eight years from the year of admission, or,</i></p> <p>d) <i>Candidate must be citizen of a foreign land holding a valid passport issued by that country. These candidates shall pay prescribed fee in USD or equivalent</i></p> <p>e) <i>Candidate must have a duly valid Certificate indicating NRI / PIO status issued by a competent authority</i></p> <p><i>Candidates with foreign diplomas should see the EdCIL website for equivalence, and if required should approach the AIU to obtain an equivalence certificate well in advance. The AIU website indicates how one may obtain an equivalence certificate for foreign diplomas.</i></p>	

Notes:

- 1) Candidates who have appeared for Class 12/QE in 2008 can also apply. They must produce marksheet of QE at the time of counselling, alongwith other documents.
- 2) Candidates may please note that fulfilling minimum eligibility criteria does not automatically entitle a candidate to be called for counselling.
- 3) Each centre will make its own merit list from amongst applicants for that centre.

4) All notifications of counselling schedules and selection lists, etc, will be announced only on the notice boards at BIT Campuses and on our website. No individual intimations will be sent to candidates. Candidates should therefore advised to regularly visit our website <http://www.bitmesra.ac.in> for any updates or any other matter related to the admission procedures.

5) The schedule of Counselling for BBA ,BCA and B. Sc. (A & M) will be announced by around fourth week of June 2008 on our website and Notice Boards at all concerned BIT Campuses.

6) Candidates should note that they would be required to have the following originals certificates and documents at the time of Counselling.

1. Pass Certificate of Class 10
2. Marksheet of Class 10
3. Marksheet of Class 12 / Intermediate or equivalent Examination
4. Originals of caste certificate and / or being physically handicapped (if applicable)
5. Originals of other special category certificates (if applicable)
6. One set of photocopies of all these documents
7. 3 recent colour passport size photographs, which should be identical to the photograph affixed in the application form

The provisional selection lists along with procedures for admissions will be announced **on the same day or next day** after the respective Counselling on the Institute website and notified at the notice board of the BIT, Mesra and all concerned BIT Campuses. No separate intimation will be sent to candidates. Provisionally selected candidates will be required to take admission in the allotted Campus within the given time period, failing which vacant seats may be allotted to waitlisted candidates.

5. Total Number and Distribution of Seats and Reservations

BIT Centres	BBA	BCA	B.Sc. (A&M)
Allahabad	100	100	-
Jaipur	80	80	60
Kolkata	90	90	-
Lalpur – Boys	100	100	-
Lalpur – Girls	100	100	-
Noida	80	80	80

Reservations

1. The Institute observes statutory reservation in respect of SC, ST and physically handicapped persons .
2. Maximum of 4% of seats in each programme may be allotted to sons and daughters of defence and paramilitary personnel who have lost their lives or been disabled in service.
3. Maximum of 1% of seats in each programme may be allotted to Candidates who are sportspersons and have represented their states at National level sports competitions.

4. Upto 20% of the seats may be allotted to girl candidates.
5. Upto 5 seats in each programme at the BIT Lalpur Campus and Upto 3 seats in each programme at the other BIT Campuses may be reserved for candidates who are sons and daughters of serving employees of BIT, who otherwise have qualified for admissions.

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

At Lalpur 50% of the total seats are reserved for candidates who have passed qualifying examination from Jharkhand and the remaining 50% of the total seats are distributed in the rest of the states. The domicile of a candidate for the purpose shall be determined on the basis of place of passing his/her qualifying examination (the location of his/her School).

Codes for State from which you have passed the qualifying examination

Zone	State	Code
	Jharkhand	JH
	Others	NJ

6. Application Material for Academic Programmes : How to Apply

1. Candidates should obtain our Undergraduate Information Brochure and Application Forms to apply
2. The prescribed application forms and Undergraduate Information Brochure will be available across the counter from **June 5, 2008 to June 16, 2008**, from all Campuses on all working days during working hours, **on payment by crossed Bank Draft of Rs. 500/- drawn in favour of Birla Institute of Technology, payable at Ranchi.** Please note that (a) payment will only be accepted by crossed bank draft as above. (b) **An application fee of Rs 250/- per application has to be sent with each completed form.**
3. To receive the Undergraduate Information Brochure of 2008 and form by post, **send a crossed bank draft for Rs. 600/- in favour of Birla Institute of Technology, payable at Ranchi,** along with two self-addressed slips of paper (10 cm x 10 cm) with your name and address clearly written in block capitals and telephone number, and a letter mentioning the course applied for to reach on or before **June 9, 2008. Write UG A- 2008 on the envelope.**
4. With each Brochure, candidates will find a set of two application forms (non-transferable). Based on their eligibility, candidates may use each form to apply for one programme at two Places for Study **Candidates must send an application fee of Rs. 250/- with each completed application form** to their **first** choice of place for study for that programme by the date specified. Each set of application form has a Form Number, which may be noted and cited in correspondence if required. Candidates should keep photocopies of their completed forms for their own reference.

5. Candidates should complete each application form neatly and send in one of the envelopes provided, along with the application fee of Rs 250/- by crossed Demand Draft, photocopies of pass certificate of class 10. marksheets of class 10 and class 12 & caste/special category certificate, and one completed acknowledgement card, **to Director of the Campus, which is the choice of Place for Study by June 20, 2008.** Acknowledgement cards will be marked with a Registration Number and sent back to candidates. **The application fee of Rs 250/- by crossed Demand Draft should be made in favour of Birla Institute of Technology, payable at the location of Place for Study.** Write your name, your application form no. and course applied –BBA or BCA or B.Sc. (A&M) on the back of photocopies of the documents.

6. Candidates may use any one of the two application forms to apply for only one of the above programmes at any two choices of Place for Study with giving preference 1 & 2– for example BBA at Noida as preference [1] and BBA at Jaipur as preference [2]. But not like BBA at Noida and BCA at Jaipur. They may also use the second application form to apply for another programme following the same procedure as described for the first one for example BCA at Noida as preference [1] and BCA at Jaipur as preference [2]. **The candidate must note that each application form must accompanied by separate application fee of Rs. 250/ - in the form Demand Draft as per instructions already given in Point 5.**

The two Forms in a set have the same unique form number. They are meant for the sole use of ONE candidate and are not transferable under any conditions. When receiving your Brochure you are advised to check that the two forms with your Brochure have the same form number. If more than one candidate submits forms from the same set having the same number, all applications with this number will be cancelled.

Procedure for applying with the downloaded application form

1. The candidate has to enclosed a crossed demand draft of Rs. 600/- in favour of Birla Institute of Technology, payable at Ranchi and another crossed demand draft of Rs. 250/- in favour of Birla Institute of Technology, payable at the location of Place for Study along with duly filled application form. The candidate will be sent the Undergraduate Information Brochure and Acknowledgement card mentioning his registration Number, which would also be displayed on the Institute Website.

2. In case the candidate wants to use second application *for* different programme, he/she has to submit additional crossed demand draft of Rs. 250/- in favour of Birla Institute of Technology, payable at the location of Place for Study.

3. Candidate are advised to read carefully all the instruction given under the heading **How to Apply.**

Important dates

Sale of Brochure and Forms commences from:	5th June, 2008
Last date for receipt of postal requests for Brochure & Form:	9th June, 2008
Last date for obtaining Brochure over the counter:	16th June, 2008
Last date for receipt of completed forms at Choice of Place for Study:	20th June,2008
Results of provisionally selected candidates will be displayed on the Institute Website by :	28th June, 2008

7. Course Structure

A. The BBA Programme and Course Structure

The BBA programme of the Institute introduces and exposes the students to various industry-specific management functions such as those in the areas of marketing, finance, human resource and systems. This enables a student to get attuned to the expectations of corporate culture.

The BBA course structure is spread across six semesters in three years. Each semester comprises of seven papers. The course content is regularly updated to keep pace with changes in the business environment.

Classroom lectures, discussions on the basis of case studies and vignettes offer the students opportunities to hone the following skills:

- Decision Making
- Statistical Analysis
- Problem Solving
- Interpersonal Relations

In addition, insights into real life industrial situations are also gained. Hence, a sound launching pad is provided for those who wish to opt for any of the following careers:

- Higher studies in Management
- A professional career in industry
- Joining a family run business
- Starting a business on his/her own

All the above efforts culminate in what a Manager has to know, or understand, in order to efficiently handle his tasks and responsibilities. Since management of any industry is intrinsically skill-focused, discipline-focused and as well as function-focused, the BBA programme trains a student to better meet the managerial expectations of the corporate sector. Graduates from other disciplines are unlikely to possess this distinctive edge over a BBA graduate to foresee and resolve issues from a holistic perspective.

As part of the curriculum, students are often asked to make either individual, or group presentations on topics pertaining to respective subjects. This effort goes a long way in organic development of certain skills, which are vital for a professional. These are:

- Communication Skills
- Interpersonal Skills

These qualities add to the level of self-confidence of a student, which are essential in dealing with the stakeholders (customers, suppliers, government etc.) and also a key to survival in a competitive industrial setting.

Finally, the BBA programme provides an ideal platform for pursuing higher studies in Management leading to an MBA.

The BBA Course Structure

Semester 1	Semester 2
BBA 101 - General Principles of Management	BBA 201 - Organizational Behaviour
BBA 102 - Business Statistics	BBA 203 - Quantitative Techniques in Management
BBA 109 – Fundamentals of Computing	BBA 210 - Introduction to 'C' Programming
BBA 104 - Business Economics	BBA 205 - Basic of Financial Management
BBA 105 - Introduction to Business Accounting	BBA 207 - Programming Lab. –II
BBA 107 - Programming Lab. I	BBA 208 - Principles of Marketing –I
BBA 108 - Business Communication I	BBA 209 - Business Communication –II

Semester 3	Semester 4
BBA 301 - Research Methodology	BBA 402 - Introduction to Multimedia & Information Technology
BBA 302 - Human Resource Management	BBA 403 - Management and Control of Cost
BBA 303 - Legal Aspects of Management	BBA 404 - Fundamentals of Operation Research
BBA 304 - Introduction to Financial Markets	BBA 405 - Introduction to Material Management & Production Management
BBA 305 - Introduction to JAVA Programming	BBA 406 - Computer Application/Multimedia Laboratory
BBA 307 - Lab. In JAVA Programming	BBA 408 - Sales & Distribution Management
BBA 308 - Principles of Marketing - II	BBA 409 - Business Ethics

Semester 5
BBA 501 - Entrepreneurship & Small Business
BBA 502 - International Trade and Business
BBA 505 - Database Design & Management
BBA 506 - Project Feasibility Report
BBA 507 - Oracle Lab
BBA 620 – Project 1
BBA 509 - Hospitality Management

Semester 6
BBA 601 - Management Information System
BBA 615 - Project Management
BBA 508- E- Commerce
BBA 621 - Project II
And any two subjects from one group and any one subject from any other group out of the following groups:

Marketing Area	Finance Area
BBA 603- International Marketing	BBA 605- Banking Concepts and Practice
BBA 622 - Service Marketing	BBA 606- Securities & Securities Market
BBA 617- Advertising Management	BBA 607- International Finance
Personnel Area	Information Technology Area
BBA 608- Manpower Planning	BBA 611- Computer Networks
BBA 609- Industrial Relation	BBA 612- Knowledge Management
BBA 610- Industrial & Labour Legislation	BBA 613- Internet & Web Page Design

B. The BCA Programme and Course Structure

This programme provides students with necessary skills to make successful careers as IT professionals in competitive situations with satisfying jobs. It also prepares students with the requisite background to proceed with confidence for higher studies in the form of MCA, MIT, MS in Computers, MBA, etc. and thus acquire greater competency.

The BCA course structure is spread across six semesters in three years. Each semester comprises of seven papers with a balanced combination of theory and practical. The course content is regularly updated to keep pace with changes in the business environment. Each Centre has well-equipped Computer Laboratories and a comprehensive Library. The computer laboratories have broadband connectivity and latest software. The library provides access to an exhaustive collection of books, Journals and magazines. The library also provides access to online Journals to introduce students to the very latest across the globe.

In the modern professional world, the BCA programme has become an important preparatory level graduate course after completing Class 12, especially in the context of the IT industry. With the exponential growth in the IT sector in our country, and with the entry and FDI of various multi-national companies, it is reasonable to expect that the IT industry will require a large number of competent professionals in coming years, more so at the entry level. It is in this context that BCA assumes a significant role. If one looks at the academic curriculum of the BCA programme, it is observed that the coverage is both horizontal, and sufficiently vertical, so that a student is groomed for the IT industry, or for higher studies. All the necessary foundation courses required for this is offered at the BCA level, starting from Mathematics which strengthens the background achieved at the 10+2 level, Programming Languages and Data Structures which hones the logical thinking and problem-solving capabilities, various application software to give an understanding and knowledge of the tools used in the IT industry, and even hard core theory papers like Digital Logic, Computer Architecture and Operating Systems for understanding the inner workings of the computer system.

It is thus worth noting that the BCA programme both in regard of aim and scope is very focused in its approach to preparing a student for IT and other professions, either directly after graduation, or after pursuing a suitable higher degree.

The Institute has signed an agreement with the University of New Brunswick (UNB), Canada for a joint degree programme in Bachelor of Science (4 years) in Computer Science. This agreement will facilitate students of our BCA programme to take admission to the Bachelor of Science (Computer Science) course at UNB after completing of two years at BIT and the remaining two years at UNB. After successful completion of the course, the student will be awarded Bachelor of Science in Computer Science by UNB.

The BCA course structure is described in the following pages. The additional optional courses are required only for students opting for admission at UNB.

The BCA Course Structure

Semester 1

Theory	Sessional
BCA 1001 - Mathematics-I	BCA 1006 - C Programming Lab
BCA 1002 - Introduction to Computer Science	BCA 1007 - IT Lab
BCA 1003 - Programming in C	
BCA 1004 - Environmental Science	
BCA 1005 - Communication Skills / Technical English	
Additional Optional Course	
BCA 1008 - Discrete Mathematical Structures	
BCA 1009 - Physics-I	

Semester 2

Theory	Sessional
BCA 2001 - Mathematics-II	BCA 2006 - Data Structure Lab
BCA 2002 - Data Structures & C++	BCA 2008 - Database Lab
BCA 2003 - Database Management Systems	
BCA 2004 - Linux Programming	
BCA 2005 - Managerial Economics	
Additional Optional Course	
BCA 2008 – Chemistry	
BCA 2009 - Physics-II	

Semester 3

Theory	Sessional
BCA 3001 – Probability & Statistics	BCA 3006 - Java Programming Lab
BCA 3002 – Logic Design	BCA 3007 - VB Programming Lab
BCA 3003 – Electronic Commerce & Applications	
BCA 3004 – Programming in JAVA	
BCA 3005 – Programming in Visual Basic	
Additional Optional Course	
BCA 3008 – Basic Electronics	
BCA 3009 –Linear Algebra	

Semester 4

Theory	Sessional
BCA 4001 – Scientific Computing	BCA 4006 – Scientific Computing Lab
BCA 4002 – Operating Systems	BCA 4007 – Computer Graphics Lab
BCA 4003 – Software Engineering Principles	
BCA 4004 – Computer Architecture & Programming	
BCA 4005 – Computer Graphics & Multimedia	
Additional Optional Course	
BCA 4008 – Legal Privacy and Security in E-Commerce	
BCA 4009 – Technical Report Writing	

Semester 5

Theory	Sessional
BCA 5001 – Internet & Web Technology	BCA 5006 – Internet & Web Technology Lab
BCA 5002 – Advanced Database Management System	BCA 5007 – Advanced Database Lab
BCA 5003 – Fundamentals of Computer Algorithms	
BCA 5004 – Fuzzy Logic and Applications	
BCA 5005 – Management Information System	

Semester 6

Theory	Sessional
BCA 6001 – Data Communication and Computer Network	BCA 6006 – Project
BCA 6002 – Distributed Computing	
BCA 6003 – Optimization Theory	
BCA 6004 – Accounting and Finance Management	
BCA 6005 – Elective	

List of Electives

1. Agile Software Development process
2. Data Mining & Warehousing
3. System Programming
4. Distributed Database Systems
5. Decision Support System

C. The B.Sc. Animation & Multimedia Programme and Course Structure

The B.Sc. Animation & Multimedia programme is a three-year (six-semester) degree course currently offered only at the BIT Noida and BIT Jaipur Campuses. This is a modular programme with exit possibilities after the second and fourth semesters. If a student exits after completion of two semesters, he will be awarded a Certificate of Merit, and if he exits after completion of four semesters, he will be awarded a Diploma.

The Birla Institute of Technology was the first institute in India to set up a full fledged degree course in B.Sc (Animation & Multimedia). The animation industry in India is breaking through into a prosperous era, offering exclusive career opportunities. There is an acute shortage of professionals in animation and gaming. The course specializes in the rapid development of artistic skills, necessary for achieving a successful career in animation and multimedia. There are ample job opportunities after graduation such as 2D or 3D Character Animator, 3D Modeler, Texture & Lighting Artist, Composer, Editor, Pre-Production Designer, Game Designer, Graphic Designer and Camera Person for Live Action or documentary films.

The fundamental philosophy of the course is to impart to the students a variety of skills and knowledge required for diverse range of career options in animation and multimedia. The course is designed in such a way that it covers all the aspects of Animation Film Making Process. Students get in-depth knowledge of different mediums in animation and graphics such as 2D Classical & Digital Animation, Concept, Character & Story Board designing, 3D Character Animation & Modeling, Graphic & Web designing and Audio-Video Production. The course covers all technologies from basic clay modeling to cutting edge computer modeling. Sufficient technical and industry focused education is imparted to enable student to enter relevant professional fields.

COURSE STRUCTURE FOR B.Sc. (ANIMATION & MULTIMEDIA)

Semester – 1

Code	Subject Title
BAM 108	Experimental Animation
BAM 102	Foundation course in Classical Animation
BAM 103	Principles of Animation
BAM 104	Creativity - I
BAM 105	Computer Laboratory on 2D Animation
BAM 109	Introduction to 3D
BAM 107	Computer Laboratory on Multimedia – I

Semester – 2

Code	Subject Title
BAM 201	Animation Techniques
BAM 202	Creativity – II
BAM 203	Audio-Video Tools & Technology
BAM 204	Computer Laboratory on Computer Graphics & Multimedia – II
BAM 205	Computer Laboratory on 2-D Digital Animation
BAM 206	Computer Laboratory on 3-D Graphics Animation Design
BAM 207	Computer Laboratory on Interactive Multimedia

Semester – 3

Code	Subject Title
BAM 301	Advanced Animation Principles
BAM 302	Digital Television Production
BAM 303	Computer Laboratory on 2D Ink Paint & Compositing Techniques
BAM 304	Computer Laboratory on 3D Modelling
BAM 305	Computer Laboratory on Web Designing & Development
BAM 306	Diploma Showcase Project – I

Semester – 4

CODE	Subject Title
BAM 401	Production for Animation
BAM 407	Computer Laboratory on 3D Character Design
BAM 403	Computer Laboratory on Compositing - I
BAM 404	Computer Laboratory on Maya Fundamentals
BAM 405	Computer Laboratory on 3D Character Animation
BAM 406	Diploma Showcase Project - II

Semester – 5

Code	Subject Title
BAM 501	Fundamental of Game Technology
BAM 502	Direction for Animation
BAM 503	Computer Laboratory on Advanced Concepts of 3D Materials Lighting & Rendering
BAM 504	Computer Laboratory on Advanced 3D Animation
BAM 505	Computer Laboratory on Gaming Technology
BAM 506	Degree Show Case Project – I

Semester – 6

Code	Subject Title
BAM 601	Computer Laboratory on Advanced Animation Tools
BAM 602	Computer Laboratory on Emerging Animation Technologies
BAM 603	Computer Laboratory on Game Development
BAM 604	Computer Laboratory on 3D Advanced Modeling, Character Rigging, Rendering
BAM 605	Computer Laboratory on 3D Character Design
BAM 606	Degree Show Case Project - II

8. Financial Information and fees payable

Fees Payable at a Glance			
Particulars	BBA	BCA	B.Sc. (A&M)
Total fees payable at the time of admission, including the fees for first semester	32,500	32,500	37,500
Fees payable for each subsequent semester	26,500	26,500	31,500

Details of Fees Payable for each subsequent semester			
Particulars	BBA	BCA	B.Sc. (A&M)
Tuition Fee, Registration Fee, Institute Examination, Library, Teaching Aids and other Student Facilities	23,500	23,500	28,500
Off Campus Charges	3000	3000	3000
Sub Total	26,500	26,500	31,500

Additional amount to be paid at the time of Admission			
University Enrollment Fee	1000	1000	1000
Caution Money (Refundable)	5000	5000	5000
Grand Total	32,500	32,500	37,500

Notes:

Students will be expected to provide themselves with stationery and textbooks, etc, as prescribed for different subjects.

The Institute reserves the right to revise the fees and other charges at any stage.

For rules regarding refund of fees on withdrawal before a student attends any classes, please see separate Notice.

9. Discipline and General Rules

The Institute places a very high emphasis on discipline of students both inside and outside the campus. Students must abide by the Institute rules and agree to conform to the rules and regulations enforced from time to time. They must not do anything either inside or outside the Institute that will interfere with its orderly governance, discipline and image.

Students must attend lectures, tutorials and practical classes regularly. A minimum attendance of 75% in lectures, tutorials and sessionals for each subject is essential for appearing in the Semester Examinations. Thus, students should attend all theory and laboratory classes from the first day of the academic year. In case of absence due to unavoidable circumstances, students are advised to take prior permission from the Dean / Head. In case of absence due to illness, students will have to produce a Medical Certificate with an application from their parents or guardians. In such a case, parents/guardians should inform the authorities immediately.

During teaching hours, the main lobby, the library, the corridors of the Institute and the area surrounding the Institute are to be observed as silence zones. Students must not cause any disturbance in these zones.

Students should strike a proper balance between extracurricular activities and academic requirements. A student's participation in extra-curricular activities should not be allowed to interfere in his/her academic schedule

Students must not indulge in any kind of misconduct or indiscipline or anti-social activities within or outside the campus. Students must not form a group causing any hindrance to the academic and administrative activities of the College. Those found doing so will be punished and strict disciplinary action will be taken by the authorities.

Students are advised to read the Notice Boards regularly.

Students are strictly prohibited from possessing or consuming spirits, tobacco products and narcotic drugs either within or outside the campus, and if found violating this will be rusticated immediately, without warning.

Students shall not damage the property of the Institute. Cost of such damage will be recovered from students, parents/guardians of the students.

Students must always carry their Identity Card and produce it on request. In case of loss or damage or Identity Card, the concerned authorities should be informed immediately.

Students are not permitted to enter and use the laboratory / workshop / sports ground if they do not wear appropriate dress. For example, they should enter the laboratory only with apron, cap or mask as instructed

Students should park their Vehicles/ Cycles in an orderly manner at the defined stands.

Students should follow the rules of the Canteen.

Ragging in any form inside or outside the campus is strictly prohibited by law. Any students found ragging other students will be summarily expelled from the Institute and dealt with as per directive of Hon. Supreme Court/Hon. High Court.

10. Applicability of Regulations for the time being in force, Disclaimer and Legal Jurisdiction

Notwithstanding the nature of a programme spread over more than one academic year, the regulations in force at the time a student joins a programme shall hold good only for the examinations held during or at the end of the semester. Nothing in these regulations shall be deemed to debar the Institute from amending the regulations subsequently and the amended regulations, if any, shall apply to all students old or new, as specified therein

Disclaimer

The statements made in this Information Brochure and all other information, contained herein are believed to be correct at the time of publication. However, the Institute reserves the right to make at any or without notice, changes in and additions to the regulations, conditions governing the conduct of students, requirements for degree, fees and any other information, or statements contained in this Information Brochure. No responsibility will be accepted by the Institute for hardship or expense encountered by its students or any other person for such changes, additions, omissions or errors, no matter how they are caused.

Legal Jurisdiction

All disputes will be subject to jurisdiction of the Civil Courts at Ranchi city only

11. Expanding Horizons

Knowledge enhances when it is shared, discussed, practiced and spread. Following this Philosophy, Birla Institute of Technology has opened many centres across the country and abroad. We have seven centres in India and three in other countries. Undoubtedly, the recent development in IT and Communication technology have facilitated realization of the philosophy of knowledge sharing with technology innovation and flexibility.

The Institute has established three International Centres, at Bahrain in 2000, at Muscat in 2001 in the Sultanate of Oman, and at Ras Al Khaimah in the United Arab Emirates in 2005. All International Centres function under the complete academic control of the Institute. Courses offered are identical to those offered at the Main Campus of the Institute at Mesra.

Birla Institute of Technology International Centre – Bahrain

Birla Institute of Technology International Centre (BITIC), Bahrain, is the first International Centre of the Institute, established in collaboration with Messrs Mohammed Jalal and Sons W.L.L, as a private educational institution under the approval of the Ministry of Education and the Ministry of Labor & Social Affairs, Kingdom of Bahrain. BITIC Bahrain offers the academic strengths of the parent University, with experienced faculty, modern laboratories and workshops having state-of-the-art equipment and machinery, a well-stocked library, computer laboratories and other facilities essential for the development of professionals of the highest competence.

Birla Institute of Technology international Centre - Ras Al Khaimah (UAE)

The Birla Institute of Technology International Centre (BITIC), Ras Al Khaimah, facilitated by Sudhir Gopi Holdings and Royal College of Applied Science & Technology, Ras Al Khaimah, commenced its academic programmes from September 2005 as the third overseas center of the Institute. In the last two years it has shown tremendous growth in terms of student intake and academic results. BITIC Ras Al Khaimah believes in developing the overall personality of students apart from their academic excellence. The students are encouraged to participate in diverse extra curricular activities for which student clubs have been formed to facilitate their overall development.

BITIC RAK will have its own five-acre campus for which construction is planned to commence from January 2008. The Institute block will have a floor area of 13430 sq m, Auditorium, Library & Computer Center and cafeteria will have built up area of 4520 sq m and hostels (separate for boys and girls) will occupy 6520 sq. m. of floor area.

BITIC RAK has recently been declared as an ISO 9001 :2000 certified educational Institution by Intertek, an internationally renowned and approved ISO certification body.

Birla Institute of Technology International Centre - Muscat, Sultanate of Oman

The Waljat Colleges of Applied Sciences founded by H.E. Dr. Omar bin Abdul Muniem Al Zawawi in 2001, is a pioneering institution of technical education and research that occupies a pride place among the technical colleges in the Sultanate of Oman.

Located in the upcoming premises of the "Knowledge Oasis" at Rusayl, a suburb of the City of Muscat, the Waljat Colleges of Applied Sciences (WCAS) attracts students from allover Oman and also from neighbouring countries.

All the facilities provided by WCAS are as per the norms laid down in the Criteria for Private Colleges recommended by the Ministry of Higher Education, Sultanate of Oman.

The academic programmes offered at WCAS are aimed at developing a wider concept of technical education that treats education, research, product development and industrial enterprise as a logical sequence for professional accomplishments. To achieve this, various facilities have been established, including state-of-art modern laboratories.