About REVA University

REVA University has been established under the REVA University Act 2012 with the vision to instill awareness, a zeal for higher learning and direct curiosity through education. REVA University was conceptualized with a view to enable change; a revisualization of the present Indian academic scenario. It breathes and practices the ideology of taking education to greater heights by touching each learner. The Founder of REVA University believes in the adage ‘Knowledge is Power’. Driven by this power of transforming lives, REVA thrives. Creating knowledge societies, building futures and imparting education.

An involvement of this level, that REVA exhibits is complemented and enhanced by its environs, a colossal landscape blanket-ed over 45 acres of land that is a standing testimony to inspiring learning and fluid exchange of ideas.

The University prides itself in contributing to every student’s holistic development. The University currently offers 33 full-time Under Graduate Programs, 24 full-time Post Graduate programs, 2 part-time Post Graduate programs, several Certificate/Diploma and Post Graduate Diploma programs in Engineering, Architecture, Science and Technology, Commerce, Management Studies, Law, Arts & Humanities and Performing Arts. Above all, the University facilitates research leading to Doctoral Degree in all disciplines. The programs offered by REVA University are well planned and designed based on methodical analysis and research with emphasis on knowledge assimilation, practical applications, hands-on training, global and industrial relevance and their social significance.

REVA University believes in preparing students through Choice Based Credit System (CBCS) and Continuous Assessment and Grading Pattern (CAGP) of education. The CBCS & CAGP pattern of education have been introduced in all programs to enable students to opt for subjects of their choice in addition to the core subjects of study and prepare them with required skills. It also provides opportunities for students to earn more credits and thereby acquire additional Proficiency Certificates and Diplomas.

Teachers and instructors with illustrious and unparalleled experience in their respective academic domains and unequalled qualification are the architects of the meticulously and conscientiously designed curriculum and program modules offered at the University. The faculty renowned for their acumen is actively part of ongoing academic dialogue globally. They also come with industry involvement and links that is translated through their teaching, thus bridging the gap between industry and academia.

The ever evolving collection of books, journals and digital content in the library and the latest IT infrastructure, ensure that students have information at their disposal to explore. REVA University is celebrated for its well-equipped laboratories which aid students in their learning and research. The custom-built teaching facilities and classrooms, the indoor and outdoor sports and cultural facilities, the multi-cuisine food court, lung spaces for students to sit with nature and campus stores, provide students an encouraging learning environment.
About
School of Applied Sciences

The School of Applied Sciences offers Under Graduate and Post Graduate programs which are incredibly fascinating and practice oriented, are also conceived to conduct project oriented studies and research. It mainly aims to attract talented youth and train them to acquire knowledge and skills which are useful to the industrial sector, research laboratories and educational institutions. The School presently offers B. Sc., M. Sc., Post Graduate Diploma and Research leading to Ph. D., in Physical, Chemical and Biological Disciplines.

Highlights of the School

- Specialised-Laboratories
- E- Learning
- Certificate Program in Clinical Research

Programs Offered

B. Sc. 3 Years (6 Semesters), Full Time Program

- B.Sc. Mathematics, Statistics and Computer Science
- B.Sc. Physics, Mathematics and Chemistry
- B. Sc. Mathematics, Statistics and Physics
- B. Sc. Bioinformatics - Biology, Computer Science & Maths
- B.Sc. Biotechnology, Biochemistry and Genetics
- B.Sc. Biotechnology, Biochemistry and Microbiology
- B. Sc. Mathematics, Economics, Computer Sciences
- B. Sc. Mathematics, Physics, Computer Science
- B. Sc. Medical laboratory Technology

M. Sc. 2 Years (4 Semesters), Full Time Program

- Physics
- Mathematics
- Chemistry
- Biotechnology
- Biochemistry

Diploma in Medical laboratory Technology (DMLT)

PG Diploma Program 1 Year (2 Semesters), Full Time Program

- Post Graduate Diploma in Clinical Research Management
- Post Graduate Diploma in Functional Genomics and Bioinformatics
B.Sc. Mathematics, Statistics and Computer Science

Overview
The aim of the department through this triple major course is to provide “a cut above the rest”, man-power to the ever growing demands of the industry and to prepare students for higher studies and research. Students will be able to hone their critical thinking skills, become independent thinkers, trouble shooters in experiments, able to become good researchers and expand knowledge in three major subjects. Our Graduates are in high demand from a broad range of employers, with varying career options.

Career Opportunities
A Bachelor’s Degree in Mathematics, Statistics and Computer Science is the minimum requirement for most careers in this field.
- Masters in respective discipline
- Masters in Computer Applications
- Masters in Management
- IT Electronic
- Defense Communications + Health
- Energy
- Aerospace
- Data Analytic
- Data Scientist + Business and Commerce for their analytical + logical approach to unraveling complex issues

Eligibility
Passing in PUC /10+2 with Mathematics as compulsory subject. Scoring at least 45% marks (40% in case of candidates belonging to SC/ST category) from any recognized Board /Council or any other qualification recognized as equivalent there to.

B.Sc. Physics, Mathematics and Chemistry

Overview
This particular combination provides an ability to identify and solve significant problems across a broad range of application areas, to develop the aptitude to apply the principles of Chemistry, Physics and Mathematics to articulate an in depth understanding of core knowledge on various subjects of Physical Sciences. It is designed to help students understand the importance of chemicals, chemical industries and the role of these in improving the quality of human life. It also helps students recognize and appreciate the contribution of great scientists in the field of Physics, Chemistry and Mathematics.

Career Opportunities
- Masters in respective discipline
- Masters in Computer Applications
- Masters in Management
- Agricultural Research Services
- Chemical Industry and related areas
- Hospitals
- Industrial Laboratories
- Medical Research and Medical Laboratories
- Manufacturing and Processing Firms
- Oil Industry and Petroleum Companies
- Pharmaceutical Companies

Eligibility
Passing in PUC /10+2 with Mathematics as compulsory subject. Scoring at least 45% marks (40% in case of candidates belonging to SC/ST category) from any recognized Board /Council or any other qualification recognized as equivalent there to.
B. Sc. Mathematics, Statistics and Physics

Overview

The aim of the department through this triple specialization course is to provide efficient man-power to the ever growing demands of the industry and to prepare students for higher studies and research. Students will be able to hone their critical thinking skills, become independent thinkers, trouble shooters in experiments, good researchers and expand knowledge in three major subjects. Our Graduates are in high demand from broad range of employers, with varying career options. The course opens up teaching as well as research opportunities in Physics. The Post Graduate course in Physics is the final formal training for students to provide in depth knowledge of the subject. Hence, regular classroom teaching is supplemented with tutorials, brain storming ideas and problem solving efforts pertaining to each theory and practical course.

Career Opportunities

A Bachelor's Degree in Mathematics, Statistics and Computer Science is the minimum requirement for most careers in this Field.

- Masters in respective discipline
- Masters in Computer Applications
- Masters in Management
- IT Electronic
- Defense Communications
- Health
- Energy
- Aerospace
- Data Analytic
- Data Scientist
- Business and Commerce for their analytical + logical approach to unraveling complex issues.

Eligibility

Passing in PUC /10+2 with Mathematics as compulsory subject. Scoring at least 45% marks (40% in case of candidates belonging to SC/ST category) from any recognized Board /Council or any other qualification recognized as equivalent there to.
B. Sc. Bioinformatics - Biology, Computer Science and Mathematics

Overview

B.Sc. Bioinformatics - Stands for Bachelor of Science in Bioinformatics. Bioinformatics is a field of biosciences that applies statistics to molecular biology. Subjects usually studied under this degree are Programming in C, Cell Biology, Genetics, Essential Mathematics & Statistics, Bioinformatics, Data Structures & Algorithms, Microbiology, Biotechnology, Biochemistry, Immunology, Biodiversity and Ecological Informatics, Genoinformatics, Applications of Bioinformatics, Molecular Biology Techniques etc.

Career Opportunities

A Bachelor’s Degree in Biology, Computer Science and Mathematics is the minimum requirement for most careers in this field. The scope for career development in Bioinformatics is immense. Graduates can seek employment in private and government hospitals. Fresh graduates can also opt for teaching jobs in Universities and Colleges. Students can work with leading scientific research institutes. In addition to this, biomedical products manufacturing industries are employing a large number of professionals from this field. There are plenty of career opportunities available in India as well as in countries abroad for Bioinformatics scientists.

Some of the top Indian companies hiring professionals in Bioinformatics

- Wipro
- Ocimumbio
- Reliance
- Jubilant Biosys
- Satyam
- Accelrys, Inc.
- Tata Consultancy Services
- IBM Life Sciences
- BioMed Informatics
- Silicon Genetics and Tessella
- Respective Masters Degree
- Interdisciplinary Research

Eligibility

Passing in PUC/10+2 with Biology as compulsory subject. Scoring at least 45% marks (40% in case of candidates belonging to SC/ST category) from any recognized Board/Council or any other qualification recognized as equivalent there to.
B.Sc. (Biotechnology, Biochemistry and Genetics)

Overview
The combination of Biotechnology, Biochemistry and Genetics familiarizes candidates with the usage of living organisms in the field of medicine, technology, engineering, and other bio products. The coursework will include Cell Biology, Molecular Biology, Genetics, Microbiology, and Biochemistry. The program aids the basis of a stronger foundation for candidates who contemplate pursuing higher studies in the fields of M.Sc., Ph.D., and M.Phil. Degree in chemical and biological sciences. Multidisciplinary approach is the essence of the course which is achieved by offering open electives. In addition to the curriculum students will have an opportunity to get enrolled for Add on and Diploma programs.

Career Opportunities
1. The Program opens a wide arena of opportunity in fields of Medicine, Marine, Pharmaceutical, Industry, Agriculture, and Environment. Students have scope in areas of Agricultural, Chemical, Energy Industries, Food Industries and other such. They can become Sr. Research Associate, Biotechnology and Biochemistry Expert, Lab Technician, Business Development Executive, Genetic counsellor and other such.
2. Graduates can pursue Masters in respective discipline

Eligibility
Those who have qualified their 10+2 examination in the stream of Science or any equivalent examination with minimum aggregate of 45% marks and above can avail for admission.
B.Sc. (Biotechnology, Biochemistry and Microbiology)

Overview

The Combination of Biotechnology, Biochemistry and Microbiology program has emerged as a key biological science, since microorganisms provide the model used in molecular biology for research purposes. There is a growing recognition of the potential of microorganisms in a range of applied areas. The course includes the study of mycology, bacteriology, virology, parasitology, and other branches along with biotechnology and biochemistry. The program aids the basis of a stronger foundation for candidates who contemplate pursuing higher studies in the fields of M.Sc., Ph.D., and M.Phil. Degree in chemical and biological sciences. Multidisciplinary approach is the essence of the course which is achieved by offering open electives. In addition to the curriculum students will have an opportunity to get enrolled for Add on and Diploma programs.

Career Opportunities

1. After completing B.Sc. course, graduates may get opportunities in areas such as Agriculture Departments, Beverage Industry, Chemical Industries, Environmental management and conservation, Fermentation Industries, Healthcare Providers, Horticulture, Medical laboratories, Pharmaceutical Companies, etc. These professionals may work in major positions like Bacteriologist, Cell Biologist, Ecologist, Farming Consultant, Geneticist, Immunologist, Horticulturist, Laboratory Technician, Molecular Biologist, Science Adviser, Virologist, Taxonomist, Scientist, etc.

2. Graduates can pursue Masters in respective discipline

Eligibility

Those who have qualified their 10+2 examination in the stream of Science or any equivalent examination with minimum aggregate of 45% marks and above can avail for admission.
B.Sc. (Biotechnology, Chemistry and Microbiology)

Overview

The combination of Biotechnology, Chemistry and Microbiology familiarizes candidates with the usage of living organisms in the field of medicine, technology, engineering, and chemical sciences. The coursework includes the study of mycology, bacteriology, virology, parasitology, Biotechnology and other branches of chemistry. It is designed to help the students to understand the importance of chemicals, chemical industries and their role in improving the quality of human life. The students will be equipped with bundles of biological techniques applied to manipulate the living cells to favor the mankind.

Career Opportunities

1. After completing their B.Sc. program, graduates may get opportunities in Chemical and Petrochemical industries, Pharmaceutical industries, Medicine, Agriculture, food Industry and other such.
2. Graduates can pursue Masters in respective discipline

Eligibility

Those who have qualified their 10+2 examination in the stream of Science or any equivalent examination with minimum aggregate of 45% marks and above can avail for admission.

B. Sc. (Mathematics, Economics, Computer Sciences)

Overview

It is a three-year degree program spread over six semesters. The course offers three subjects, namely Computer science, Mathematics and Economics, with equal emphasis given to each of these three majors. English language and optional languages are also part of this curriculum, which can be pursued during semesters 1 to 4. Practical-based laboratory sessions are an integral part of the curriculum, as shown in the course structure.

The main objectives of the course are:
- To impart working knowledge of fundamental concepts in basic areas of Economics such as finance, business and many other fields or to proceed to further study.
- To provide a comprehensive understanding of programming concepts and to understand software development as a part of computer science
- To provide an understanding of advanced mathematics

Career Opportunities

- Actuarial analyst
- Financial risk analyst
- Chartered public finance accountant
- Forensic accountant
- Data analyst
- Economist

Eligibility

Passing in PUC /10+2 with Mathematics as compulsory subject. Scoring at least 45% marks (40% in case of candidates belonging to SC/ST category) from any recognized Board /Council or any other qualification recognized as equivalent there to.
B. Sc. (Mathematics, Physics, Computer Science)

Overview

The main objectives of the course are:

- To provide a comprehensive understanding of programming concepts and to understand software development as a part of computer science.
- To provide an understanding of advanced mathematics.
- To impart working knowledge of fundamental concepts in basic areas of physics such as classical mechanics, quantum mechanics, electricity and magnetism, and thermodynamics.

It is a three-year degree program, spread over six semesters. The course offers three subjects, namely Computer science, Mathematics and Physics, with equal emphasis given to each of these three majors. English language and optional languages are also part of this curriculum, which can be pursued during semesters 1 to 4. Practical-based laboratory sessions are an integral part of the curriculum, as shown in the course structure.

Career Opportunities

- Programming and software development
- Telecommunications and networking
- Training and support
- Biomathematics
- Metallurgy
- Information systems operation and management
- Computer science research
- Computer industry specialists
- Cryptography
- Radiation protection practitioners
- Web and internet
- Actuarial Science
- Geophysics
- Graphics and multimedia
- Operations research
- Field seismology

Eligibility

Passing in PUC /10+2 with Mathematics as compulsory subject. Scoring at least 45% marks (40% in case of candidates belonging to SC/ST category) from any recognized Board /Council or any other qualification recognized as equivalent there to.
B. Sc. Medical Laboratory Technology (BMLT)

Overview

Medical laboratory Technology is a branch of medical science in performing clinical laboratory investigations which is the first step of diagnosis of any diseases followed with treatment and prevention. The course covers preclinical subjects such as Biochemistry, Pathology, Microbiology, Blood Banking and Basics in laboratory equipment. The program provides knowledge and training for opted candidates to place in different clinical laboratories. Students enrolled in BMLT are imparted training in laboratory management ethics through practical sessions, internal assessment, viva-voce and an internship training program/clinical postings in every semester. The associated laboratories/hospitals are Elbit and Leucine Diagnostics centres, Columbia Asia and Apollo hospitals for Clinical postings. These professionals play an important role in collecting, sampling, analysing, reporting and documenting of clinical investigations.

Duration - 3 Years (Six Semesters)

Eligibility

The candidate should have passed XII (12th) Science or an equivalent examination with Physics, Chemistry and Biology with an aggregate of minimum 40% marks. For reservation category (SC/ST/OBC/Minority) the aggregate of minimum 35%marks in Physics/chemistry and Biology is required. Candidates who passed 10+2 of CBSE or any other board with Medical laboratory technology (as a vocational course) are also eligible.

Career Prospects

- Graduates, after their completion of Bachelor of Science program in MLT have a very wide scope of securing a career in various fields.
- Candidates can perform activities such as analyzing human body fluids, assisting the concerned doctor in the treatment of diseases and detecting the presence or absence of certain microorganisms in the patient's body.
- A talented MLT graduate can earn a thriving profession in any of the public or private sector hospitals, blood donor centers, emergency centers, laboratories, R&D and so on.
- They can get into various firms as laboratory technician / assistant lab technician / technology manager / laboratory manager / research associate / medical record technician / lab assistant / professor / medical officer / medical lab technician / resident medical officer / laboratory testing manager.
- Higher Studies Options after the program are Masters of Science in Medical Lab Technology, Clinical Microbiology, Clinical Biochemistry, Medical Imaging Technology, Medical Technology, Nuclear Medicine Technology; PG Diploma in Clinical Genetics and Medical Laboratory, Laboratory Services, Medical Laboratory Technology

Diploma in Medical Laboratory Technology (DMLT)

Diploma in Medical Laboratory Technology (DMLT) pertains to diagnosis of diseases through laboratory investigations of clinical samples. It is a two year program and a pass in 10+2 or its equivalent with science subjects (Physics, Chemistry and Biology) are eligible. The qualified candidates will be placed in any clinical diagnostic laboratories.
Post Graduate Diploma in Clinical Research and Management  
(REVA University in Association with Clini India)

Overview

Clinical Research Industry has grown around the world at an unparalleled rate in the past few years. It has opened up new vistas of employment for a large number of people in India as well. It is one of the most knowledge-intensive industries and complete biography of drug from its inception in the lab to its introduction to the consumer market and beyond. Clinical Research is a systematic study to evaluate the effectiveness and safety of medications or medical devices by monitoring their effects. Clinical research has become a multi-billion and multidisciplinary industry. A number of factors favor India as a clinical research hub.

Program Specialty

- Clinical Research Outsourcing
- Implementations of electronic records in Clinical Trials
- Enabling an integrated clinical enterprise
- Efficient IT support

Course Content

- Clinical Trial Management
- Clinical Data Management
- Pharmacovigilance
- Medical Writing

Duration

- 2 Semesters
- 7 Months of Classroom Training
  + 3-4 Months of Project Work

Eligibility

- MBBS/ BDS/ BAMS/ BH MS etc.: Candidates with Graduate/ Post Graduate qualifications in Medical and allied Fields like Dentistry, Homeopathy, Ayurveda and Veterinary Science and Pharmacy.
- Pharma Students B.Pharm/ M.Pharm/ Pharm.D
- M.Sc./ B.Sc. [Life Sciences]- Graduate and Post Graduate in: Biological sciences [Microbiology, Biotechnology, Biochemistry, Zoology], Nursing (B.Sc. M.Sc.), Physiotherapy(BPT/ M PT)

Potential Employers

- Contract Research Organizations
- Pharmaceutical Companies
- IT Companies
- Premier Hospitals

Immediate Job Profiles

- Clinical Research Coordinator / Associate
- JRF / SRF
- Pharmacovigilance Scientist
- Drug Safety Associate
- Clinical Data Associate / Data Process Associate
- Medical Coader
- Document specialist
- Regulatory Affairs

Project Work

To fulfil the program requirement. PGDACR is divided into 2 Parts - Classroom + Dissertation work. Dissertation program will be for three months, will be conducted at Clini India, Bengaluru Campus. Participants will undergo an extensive program in Clinical Research & Clinical Data Management.
Post Graduate Diploma in Functional Genomics and Bioinformatics

Overview

Knowledge of genome structures from various organisms and the rapid development of technologies that exploit such information have a big impact on biology, medicine and biotechnology. The Post graduate Diploma in Functional Genomics and Bioinformatics provides expertise in the execution of a variety of molecular assays, including OMICS technologies and expertise in statistical and bioinformatics analysis, as well as interpretation of complex OMICS data sets. The expertise in molecular techniques, biostatistics, bioinformatics and biotransformation allows effective experimental design advice.

More specifically The Functional Genomics and Bioinformatics provides each of the research projects with:

- Cost effective, priority access to state-of-the-art genomics, transcriptomics, epigenetics, basic proteomics and other molecular based technologies, as well as consultation to ensure that the full potential of these resources is realized.
- Proactive consultation and advice to Research Program investigators regarding the integration of new and emerging technologies for genomics, transcriptomics, epigenetics, proteomics and other molecular based approaches in their individual research programs.
- Expert advice on the optimal design of OMICS and other molecular assay based experiments (e.g. RNA-Seq based gene expression profiling, genotyping, epigenetics), taking into account technical details associated with sample preparation and processing, as well as sample size and its implications on statistical and bioinformatics analysis and interpretation of the data.
- Comprehensive analysis for OMICS and other types of data, including data modeling, statistical significance and bioinformatics analysis, data mining (e.g. cluster analysis, pathway analysis) and interpretation.
- Leadership in the preparation and publication of scientific manuscripts

Eligibility

- B.Sc. and M.Sc. in Life Sciences/Biological Science
- MBBS/BDS,
- B.Pharm/ M.Pharm

- M.Phil: Life Sciences/ Biological Sciences
- Ph. D. on Life Sciences/ Biological Sciences

Duration:

1 year (2 semester)

Career opportunities

Genomics and Bioinformatics have biggest career growth in highest demand on healthcare, biopharmaceutical, genomics and agricultural industries. We will prepare the students with high profile career on genomics “DATA SCIENTIST” in trending genome informatics professional. Big data is pouring out of life sciences research, creating ample opportunities for scientists with computer science expertise. Explosion in Bioinformatics Career, BIG Pharma, Healthcare, IT-Sector and Academia is looking for professional who have multitude of skills and combination knowledge of Genomics and Informatics.

Genomic companies with highest career opportunities in India

Strand Genomics, Genotypic Technologies, MedGenome, MapMyGenome, Agrigenomics, Xcelris Genomics, Scigenomics, X-code Life Science etc...
REVA Way of Life:

**Library and Information Centre**
Browse through lakhs of books in libraries

**Open Air Theatre**
Always brings a variety of Cultural programs by different groups of students

**Sports**
Outdoor and indoor sports facilities

**NCC & Voluntary Work**
NCC Students and other volunteers involve in social work, such as, organising medical camps, blood donation camps, camps in rural areas

**Digital Class Rooms and Laboratories**
Well-equipped with modern gadgets and digital facilities

**Fitness**
Multi-gym station helps students exercise and keeps them fit and healthy.

**Food Court**
North Indian, South Indian, Chinese Dishes, Ice Cream, Juices and Beverages.

**Auditorium and Seminar Halls**
Adequate number of auditorium and seminar halls to facilitate such curricular and co-curricular activities.

**Students’ Clubs**
Literary Club, Science clubs, Sports club, Robotics, Eco club, Quiz club, Dance and Drama club

**Green Campus with Open Air Amphitheater**
It keeps the campus cool and fills it with fresh and clean air

**Brand Store**
Variety of REVA branded merchandise, apparels, University hoodies, gift articles, and a wide range of stationeries.

**Hostels**
Home away from home

**Guest House**
ATITHI provides rooms for parents and visitors

**Transportation**
Routes through all parts of Bengaluru city
Under Graduate Programs

- **B.Tech.**
  - Computer Science
  - Computer Science and Information Technology
  - Electronics and Communication
  - Electronics and Computer
  - Mechanical | Civil | Electrical and Electronics
  - Electrical and Computer

- **B.Arch.**

- **B.A., LL. B. (Hons.)**  **B.B.A., LL. B. (Hons.)**

- **BBA**
  - Industry Integrated | Honours | Aviation
  - Entrepreneurship | Retail Management

- **B. Com**
  - Industry Integrated | Honours | Capital Market

Post Graduate Programs

- **M.Tech.** (Full time and Part time)

- **MBA**
  - Marketing | Finance | Human Resource | Entrepreneurship
  - Media & Mass Communication | Banking and Insurance
  - International Business | Operation Management

- **MCA  M. Com  LL. M.** (One Year)

- **MS in Computer Science**

- **M. Sc.**
  - Biochemistry | Biotechnology | Chemistry
  - Mathematics | Physics

- **M. A.**
  - English | Journalism & Communication

- **MPA in Bharatanatyam | Kuchipudi | Mohinyattam**

Diploma / PG Diploma Programs

- Diploma in Kuchipudi | Bharatanatyam
- Diploma in Plumbing & Irrigation Systems
- Diploma in Medical Laboratory Technology (DMLT)
- PG Diploma in Clinical Research Management in association with Clini India
- PG Diploma on Functional Genomics and Bioinformatics
- PG Program In Entrepreneurship & Construction Management

Research Programs

- **Ph. D.**
  - Engineering | Management Studies | Commerce
  - Science and Technology | Arts and Humanities