



# SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University),  
Porur, Chennai - 600116

Graded as a Category - I University by the UGC and Accredited by NAAC with 'A' Grade

## PROSPECTUS (REVISED)

FOR ADMISSION TO THE FOLLOWING PROGRAMMES THROUGH  
INTERVIEW FOR THE ACADEMIC YEAR- 2020-21

- ☞ B.Sc.(Hons) Sports and Exercise Sciences
- ☞ B.Sc.(Hons) Medical Microbiology and Applied Molecular Biology
- ☞ B.Sc. (Trauma Care Management)
- ☞ B.Sc. Clinical Nutrition
- ☞ B.Sc. Bioinformatics
- ☞ B.Sc. Health Informatics
- ☞ B.Sc. Data Sciences
- ☞ B.Sc. (Hons) Environmental Health Sciences
- ☞ B.Sc. Applied Psychology
- ☞ B.Sc. Clinical Research
- ☞ B.Sc.(Hons) Medical Laboratory Technology
- ☞ B.B.A. Hospital & Health Systems Management



Reaccredited by  
National Assessment and  
Accreditation Council with  
'A' Grade



NABH Reaccredited



NGCMA, DST, Govt. of India  
GLP Compliance Certified  
CEFT  
(Centre for Toxicology &  
Developmental Research)



**(Late) Shri N.P.V. RAMASAMY UDAYAR**  
**FOUNDER - CHANCELLOR**

### *The Mission*

*Sri Ramachandra University  
will actively promote and preserve the higher values and ethics  
in education, health care and research and  
will pursue excellence in all these areas  
while consciously meeting the expectations  
of the people it serves without prejudice and  
in all fairness stay socially meaningful  
in its propagation of the various arts and sciences  
to enrich humanity at large.*

# **SRI RAMACHANDRA**

**INSTITUTE OF HIGHER EDUCATION AND RESEARCH**

**(Deemed to be University)**

**Graded as a Category - I University by the UGC and Accredited by NAAC with 'A' Grade  
Porur, Chennai – 600116**

Sri Ramachandra Medical College and Research Institute was established by Sri Ramachandra Educational and Health Trust in the year 1985 as a private non-profit self-financing institution dedicated to serve the society as a Centre of Excellence with emphasis on medical education, research and healthcare. In view of its academic excellence, the Government of India declared Sri Ramachandra Medical College & Research Institute as a Deemed University in September, 1994 under Section 3 of the University Grants Commission Act, 1956. The Trust achieved the task of establishing this Institution as a “Centre of Excellence” under the leadership of Late Shri. N.P.V. Ramasamy Udayar who was the Founder & Managing Trustee of the Trust and also the first Chancellor of the Deemed University. Shri. V.R. Venkataachalam is currently the Chancellor of the Deemed University and also the Managing Trustee of the Trust. Shri R.V. Sengutuvan is the Pro-Chancellor of the Deemed University.

The objective of the institution is to have the facility raised and developed to a level comparable to any major medical establishment in advanced countries. With this goal in mind, the Trust, in close co-operation of, and the able guidance from professional experts in administration and teaching, has developed this sprawling 150 acres of green campus to a level of a prestigious Deemed University today. Further milestones were reached as on April 1, 1997 when an inter-institutional alliance between Harvard Medical International, USA and Sri Ramachandra Medical College and Research Institute was signed, which had further led the institution towards quality in the areas of medical education, health care and research and enhanced its visibility and recognition at the international level.

Harvard Medical International, in its annual report 2007, stated that “Sri Ramachandra is the model of a learning institution in both its medical school and hospitals. They have pursued faculty development with great rigor, and in the hospital are striving to be a quality leader in India. The Institution stands out because of its commitment to taking care of all”.

As notified by the Central Government, the name of the Deemed University has been changed as Sri Ramachandra Institute of Higher Education and Research. An important milestone has been achieved when Sri Ramachandra Institute of Higher Education and Research was graded as Category - I University by UGC in 2018.

Sri Ramachandra Medical College and Research Institute is among the very few Medical Institutes in India which have been sanctioned 250 seats in MBBS Degree course by the Medical Council of India from the academic year 2011-12. In the National Institutional Ranking Frame work (NIRF – 2020), SRMC & RI has been placed at 13th rank among the Medical Colleges, Sri Ramachandra Faculty of Dental Sciences at 7th rank among the Dental Colleges and Sri Ramachandra Faculty of pharmacy at 26th rank among the Pharmacy Colleges in the country by Ministry of Health & Family Welfare, Government of India.

#### **ACCREDITATION:**

Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) has been accredited (cycle-2) by National Assessment and Accreditation Council (NAAC) with CGPA of 3.62 on four point scale at 'A' Grade and ranked 28 among Universities in NIRF – 2020.

The Clinical Laboratory is NABL accredited. The CEFTE is a GLP certified animal and toxicology facility located within the Deemed University. It is the first Medical University in India to get the GLP Certification from DST, Govt. of India.

UNESCO Chair in Bioethics has been established at the Deemed University.

#### **FACULTIES/CONSTITUENT COLLEGES:**

The following are the Faculties/constituent colleges of Sri Ramachandra Institute of Higher Education and Research (Deemed to be University):

1. **Sri Ramachandra Medical College and Research Institute**
2. **Sri Ramachandra Faculty of Dental Sciences**
3. **Sri Ramachandra Faculty of Pharmacy**
4. **Sri Ramachandra Faculty of Nursing**
5. **Sri Ramachandra Faculty of Physiotherapy**
6. **Sri Ramachandra Faculty of Allied Health Sciences**
7. **Sri Ramachandra Faculty of Management Sciences**
8. **Sri Ramachandra Faculty of Biomedical Sciences & Technology**
9. **Sri Ramachandra Faculty of Public Health**
10. **Sri Ramachandra Faculty of Sports & Exercise Sciences**
11. **Sri Ramachandra Faculty of Clinical Research**
12. **Sri Ramachandra Faculty of Engineering and Technology**

The Deemed University offers at present D.Sc., Ph.D., 35 Degree courses at undergraduate level in medical, dental, para-medical, allied health sciences and Engineering & Technology disciplines and 51 courses in Medical, 8 courses in Dentistry , 47 para-medical and Allied Health sciences and 2 M.Sc. Degree Programs in Engineering & Technology at Postgraduate level, besides the 13 HSSC courses and 1 Certificate Course. In all, around 6,800 students who come from different parts of the country and abroad receive their teaching and training within the campus which presents a vibrant atmosphere highly conducive for higher education.

### **SRI RAMACHANDRA MEDICAL COLLEGE AND RESEARCH INSTITUTE:**

Sri Ramachandra Medical College and Research Institute has, since its inception in 1985, always been in the forefront of medical education. A fully integrated, innovative, competency based curriculum as notified by the Medical Council of India has been developed for the MBBS Degree program that allows students to learn in a patient-centered manner. With assistance from Harvard Medical International and through extensive faculty development, value addition has been provided to the MBBS and MD/MS program to make it more student centered. Class rooms have been redesigned with smart boards and simulation lab to reflect the new teaching ethos. Small group discussion areas have been created.

- Sri Ramachandra Medical College and Research Institute is recognized by the Medical Council of India, General Medical Council of UK, Medical Council of Thailand and Sri Lanka.
- Sri Ramachandra Medical College and Research Institute is included in the Directory of the World Health Organisation.
- The Medical Council of India (MCI) has recognized Sri Ramachandra Medical College and Research Institute, of Sri Ramachandra Institute of Higher Education & Research (Deemed to be University), as a Nodal Centre to conduct both Basic and Advance course in Medical Education Technologies to the faculty members working in around 40 Medical Colleges in the South India.

### **LIBRARY:**

A centrally air-conditioned large Library, known as Sri Ramachandra Learning Centre is ideally located in an area of 40,000 sq.ft. The students and faculty gain free access to a large collection of Medical, Dental, Engineering and related books and journals gathered over a period of 35 years which provide rich study and reference material. The Library has a good stock of audio and video-cassettes on various subjects and facilities for microfiche access. The “e-Learning Resource Centre” with 48 new updated systems and Wi-Fi facility with access to Medlars, Internet

and CD-ROM facilities. It is an excellent learning centre in which a huge collection of models of anatomical interest are also exhibited for the benefit of the students and faculty. Apart from this, book bank services are also available for the students. In addition to hard copies, around 1,000 journals are also available online at the active learning centre through “ProQuest & MEDLARS”, where unlimited access is available to the students. RFID reader facility has been introduced.

### **HOSTELS:**

There are separate hostel facilities for both men and women students with 3500 single rooms inside the campus to accommodate undergraduate and postgraduate students in medical, dental and other disciplines. The campus has continuous running soft water supply and power supply. The avenues of trees and green plants give a resort-like-ambience which is highly conducive to pleasant learning and peaceful living within the campus. Hostels are also equipped with internet facility for the benefit of the inmates.

### **SRI RAMACHANDRA HOSPITAL:**

Sri Ramachandra Hospital is a major Tertiary care and referral centre located within this campus. The Hospital caters to the needs of the students for their learning and training in various specialities. Placed in a suburban locality and amidst major highways, the hospital serves a cross section of the community belonging to every economic segment of the society. On an average 5,000 patients visit the out-patient facility everyday. The diagnostic capability available at the hospital is comparable to any University Hospital in any advanced country. The sophisticated clinical laboratory, and a wide range of imaging facilities including C.T. Scan, MRI, Multi Detector Slice Spiral CT, Cardiac Angiography, Cerebral Angiography and Gamma Camera add to the diagnostic armamentarium of the Hospital.

The Neurology Laboratory, Pulmonology Laboratory, Non-invasive and invasive Cardiac Laboratories have all been developed to the current state-of-the-art level. The most modern operation theatres, ICU and Critical Care beds add to this unique facility. The students have unlimited opportunities to learn in this modern hospital. Similarly, specialities have grown in the last 34 years in every facet of medical advancement. The Cardio Vascular & Thoracic Surgery programs have already reached a significant level of perfection as also the other major divisions like Vascular Surgery, Neuro Surgery Interventional Neuro Radiology, Critical Care Medicine, Reproductive Medicine hepatology, hand surgery, radiation avelogy, cardiac anaesthesiology, rheumatology, surgical medicine and ovelogy services.



Clinical Skills Labs in several departments like Orthopaedics, General Surgery, Obstetrics and Gynaecology, ENT provide opportunities for postgraduate students to acquire the much sought after practical skills in complex surgical procedures.

#### **TELEMEDICINE:**

The Deemed University has national level visibility as a centre of excellence in exploiting Information Technology to the hilt, by establishing state-of-the-art Telemedicine facility through Satellite, ISDN lines and Internet connectivity. Both students and the faculty benefit from Tele-Medicine Centre which is well connected with various national and international Institutions.

#### **CENTRAL RESEARCH FACILITY:**

The Central Research Facility (CRF) which was established in 2007, as the “A to Z gateway” for research, takes care of all logistics of research planning, research projects administration, research documentation, providing centralized sophisticated equipment facility and University-Industry Liaison Centre with IPR/patents Cell, etc., on a ‘ready to use platform’ of the entire Deemed University.

The CRF is housed in a 25,000 sq.ft. exclusive facility with a sophisticated instrumentation laboratory containing the latest equipments. CRF also has the (i) Centre for Life style diseases; (ii) Centre for Stem Cell Research; (iii) Centre for Indian Systems of Medicine and (iv) Centre for preclinical and Translational Medicine. There is also the FDA audited and DCGI Registered Clinical Trial Division and other 14 Centers of Research recognized by National and International agencies. In the last 5 years, 83 sponsored research projects with grants to the tune of INR 375.9 million have been carried out in the Deemed University.

Further, the Centre for Toxicology and Developmental Research (CEFT) is also functioning in 15,000 sq.ft. area with state-of-the-art facilities and it has been approved by Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA) as a GLP compliant animal facility. CEFT undertakes a number of preclinical toxicology studies for Researchers and Industries.

#### **ANTI-RAGGING MEASURES:**

Ragging is strictly prohibited in this Campus. Sri Ramachandra Institute of Higher Education and Research (Deemed to be University) strictly enforces anti-ragging measures and the campus is free from any form of ragging. Any violation will be dealt with according to the law in force and as per the directives of the Supreme Court of India.

**The Deemed University has adopted the**

- I. “UGC Regulations on curbing the menace of Ragging in Higher Educational Institutions, 2009” (as amended);
- II. “Medical Council of India(Prevention and Prohibition of ragging in Medical College / Institutions) Regulations, 2009” (as amended);
- III. “Dental Council of India Regulations on curbing the menace of Ragging in Dental Colleges, 2009” (as amended); and
- IV. All India Council for Technical Education notified Regulations for prevention and prohibition of ragging in AICTE approved Technical Institutions vide No. 37-3/LEGAL/AICTE/2009 dated 01.07.2009.

**These Regulations shall be applicable to all students. Full text of the Regulations is available in the University Website: [www.sriramachandra.edu.in](http://www.sriramachandra.edu.in).**

Further, attention of the students and parents is invited to Sections 4 and 5 of the Tamil Nadu Prohibition of Ragging Act, 1997 which are reproduced below:

**Section 4:** - Whoever commits, participates in, abets or propagates ‘ragging’ within or without any educational institution, shall be punished with imprisonment for a term which may extend to two years and shall also be liable to a fine which may extend to Rs.10,000/- (Rupees Ten thousand).

**Section 5:** - Any student convicted of an offence under section 4 shall also be dismissed from the educational institution and such student shall not be admitted in any other educational institution.

**Data on Ragging:**

- I. No. of ragging incidents during the academic year 2019 - 20 : NIL
- ii. Punishment awarded : NIL

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## ADMISSION TO UNDERGRADUATE PARA MEDICAL DEGREE PROGRAMMES 2020-21

### 1. PROGRAMMES OFFERED:

Sl.No.	Name of the Degree Programme	Duration	Eligibility (with subjects noted below)	No. of Sanctioned Seats *	Fee per Academic Year
1	B.Sc. (Hons) Sports and Exercise Sciences	4 Years **	Pass in HSC	40	75,000/-
2	B.Sc. (Trauma care Management)	4 Years **	Pass in HSC	50	50,000/-
3	B.Sc. Clinical Nutrition	3 Years	Pass in HSC	50	75,000/-
4	B.B.A. Hospital & Health Systems Management	3 Years	Pass in HSC	30	50,000/-
5	B.Sc. (Hons) Medical Microbiology and Applied Molecular Biology	4 Years **	Pass in HSC	30	1,00,000/-
6	B.Sc. Bioinformatics	3 Years **	Pass in HSC	30	75,000/-
7	B.Sc. Health Informatics	3 Years **	Pass in HSC	30	75,000/
8	B.Sc. Data Sciences	3 Years **	Pass in HSC	30	75,000/
9	B.Sc. (Hons) Environmental Health Sciences	4 Years **	Pass in HSC	30	75,000/
10	B.Sc. Applied Psychology	3 Years	Pass in HSC	30	75,000/
11	B.Sc. Clinical Research	3 Years	Pass in HSC	30	75,000/
12	B.Sc.(Hons) Medical Laboratory Technology	3 Years	Pass in HSC	20	75,000/

\* including NRI seats

\*\* including Internship Period

### **About the B.Sc. (Hons) Sports and Exercise Sciences Degree Programme: (Under CBCS)**

The B.Sc. in Sports and Exercise Sciences Degree course is being offered by the Deemed to be University in collaboration with the University of Cape Town, South Africa, a world renowned university for sports medicine and exercise sciences. The faculty of University of Cape Town participate in teaching and training of students enrolled in this course. This is a four-year course, covering all aspects of sports and exercise science. Sri Ramachandra Institute of Higher Education and Research (Deemed to be University ) has put up the necessary infrastructure like the state of the art gymnasium, with excellent equipment, etc. The Deemed University already has excellent playfields and other sports and recreational facilities. Besides classroom teaching in theoretical aspects, the students will be enabled to have practical experience by postings in various sports and athletic clubs and other establishments. Students who graduate will have ample opportunities in getting employment in sports establishments, wellness centres of reputed hotels, IT industry, clubs -- both private and public sector.

## **B.Sc. Bioinformatics Program (Under Choice Based Credit System)**

### **INTRODUCTION**

Bioinformatics program focuses on developing methods and software tools for understanding large biological data. It is an interdisciplinary field of science that combines computer science, statistics, mathematics, and engineering to analyze and interpret biological information. The field of bioinformatics experienced explosive growth by the Human Genome Project and rapid advances in DNA sequencing technology. Genome-wide association studies are a useful approach to pinpoint the mutations responsible for such complex diseases. Massive sequencing efforts are used to identify previously unknown point mutations in a variety of genes in cancer. There is a strong need to train students in these core areas, who in turn can work to increase life expectancy and improve the quality of health fostering both humans and animals. The future and present scope of Bioinformatics is increasing as the need of medical science is increasing rapidly.

The Department of Bioinformatics has been offering post graduate programs in Medical Bioinformatics (M.Sc.) for more than 14 years, and has been instrumental in bringing together academicians and eminent professionals from different government/non-government organizations, in the process of quantifying various molecular parameters and their health impacts. This led us to realize the lack of a multidisciplinary training in this area at the undergraduate level. Hence, this 3-year B. Sc. Bioinformatics provides a profound theoretical and practical knowledge in genetics, cell biology, applied mathematics, biostatistics and key aspects of computer science. It will equip you with the knowledge and skills to tackle real-world life science problems from an informatics and computational perspective. This course also provides an overview of the requirements of current legislation and standards pertaining to biomedical sciences. This program lays strong foundation to the students for preparing themselves as leader's biomedical sciences.

### **SCOPE**

The students after completing the under graduation can join higher studies in biomedical sciences, molecular biology, biotechnology, bioinformatics, human genetics and other life science programs. The student who completes this program will be highly skilled analyst in biological data, informatics and computation programming. Because of the overlap with many disciplines, these students will be able to take an analyst job, in many disciplines.

### **PROGRAM HIGHLIGHTS**

- B.Sc. Bioinformatics is a semester based CBCS curriculum program offering 130 credits.
- **Duration:** 3 years including 6 months internship.

### **PROGRAM SUMMARY**

#### **B.Sc. Bioinformatics**

1. The 3-year B.Sc. Bioinformatics program includes class room and laboratory teaching for the 2½ years and an internship for the last 6 months, with a total of **130 credits**
2. This program is for 6 semesters *i.e.*, 2 Semesters / year.
3. Total of 35 courses which comprises of core theory, practical, electives and skill enhancement courses earning a total of 110 credits in 2½ years. In the final semester, 15/20 credits during internship can be earned to give a total of **130 credits** for this degree program.
4. Each semester has 100 working days.
5. The grade system indicates a 10 point scale of evaluation of the performance of students in terms of grades and grade point.
6. Grade point average (GPA) and Cumulative grade point average (CGPA) will be declared as per the CBCS.
7. The Degree of B.Sc. Bioinformatics will be awarded after successful completion of the prescribed course.

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## **B.Sc. Health Informatics Program (Under Choice Based Credit System)**

### **Introduction:**

Health Informatics is a term describing the acquiring, storing, retrieving and using of healthcare information to foster better collaboration among a patient's various healthcare providers. Health Informatics plays a critical role in the push toward healthcare reform.

### **About this Course :**

**B.Sc. Health Informatics** is a 3 years Non-medical Program consist of 5 regular semesters & 6 months internship during the final year. This program is offered under Choice based Credit system with a total number of **130** credits.

**INTERNSHIP:** On successful completion of all the 5 semesters, the students will have to complete Internship Training in Hospital/Department/appropriate Organization/Company, for a period of not less than 6 months as a part of the course. Hospitals/appropriate center will be allotted by the Director/HoD at the end of 5<sup>th</sup> semester. Degree will be awarded only after the completion of Internship. The Dept. will collect the required Internship Completion Certificate from the concerned Hospital/Department/Company and it will be passed on to the University

### **Course Description**

This **B.Sc. Health Informatics**, course has been designed to explore the healthcare information technology planning and management issues associated with decision making in healthcare organizations. IT provides a framework to understand the types of information systems prevalent in healthcare organizations, evaluate specific strategies related to healthcare IT investments, and understand the ramifications of health data standards and privacy concerns on information management policy.

In this course, students will be encouraged to learn, how the core competencies of healthcare informatics can be developed and applied using real-world case studies. In addition, students will be exposed to specific concepts related to electronic medical records (EMR), health data and standards, sourcing, and IT investments in healthcare.

Upon completion of the course, student should be able to explain the key information requirements for effective health information management and decision support, plan and develop the governance and oversight requirements of healthcare IT projects, understand the specification and selection process of healthcare Information projects, and apply these competencies to real-world problems.

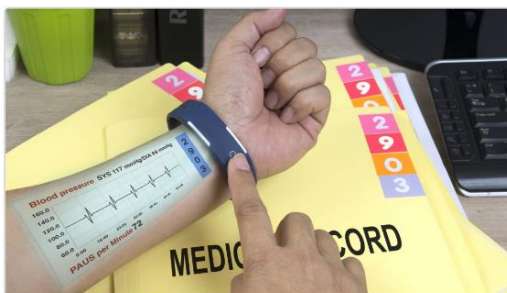
### **Major topics to be covered in Academic Delivery include:**

Healthcare information/data management  
Clinical information systems / electronic medical records  
Healthcare information technology architecture  
IT Governance & Security in healthcare organizations  
Health IT software selection & Developments.  
Meaningful Use.

### **Job Opportunities :**

Demand for health informatics jobs is predicted to increase over the next decade. Medical facilities from Hospitals, Nursing homes and IT Companies are in need of qualified professionals to help successfully complete the mandated goals to implement the "meaningful use" of Health Data generated from electronic health and medical records regularly. After completing the course students may join jobs such as Health Informatics Specialist , Healthcare Data Analyst. EMR Data Analyst, Healthcare IT professional etc. Moreover, completing an Internship in the final year will also provide additional opportunity of choosing the job profile by the students.

Apart from the above, students are also eligible to proceed to PG programs such as Bioinformatics, Biomedical Informatics, Clinical Informatics, Applied Informatics and other interdisciplinary domains.



Making Wearables Work: User Comfort is the Next Step for IoT Connected Devices

## PROGRAM SUMMARY

### B.Sc. Health Informatics

1. The 3-year B.Sc. Health Informatics program includes class room and laboratory teaching for the first 2½ years and an internship for the last 6 months, with a total of 130 credits.
2. This program is for 6 semesters i.e., 2 Semesters / year. At the end of 5<sup>th</sup> semester the student will have to undergo an internship program, rotated to various Organizations/ Departments/Labs.
3. Total of 35 courses which comprises of core theory, practical, electives and skill enhancement courses earning a total of 130 credits in three years.
4. At the end of the 2<sup>nd</sup> year students will be rotated to various departments to get trained in various sub-domains of Health Institutes.
5. Each semester has 100 working days.
6. The grade system indicates a 10 point scale of evaluation of the performance of students in terms of grades and grade point.
7. Grade point average (GPA) and Cumulative grade point average (CGPA) will be declared as per the CBCS.
8. The Degree of B.Sc. Health Informatics will be awarded after successful completion of 6 months Internship at the end of the programme.

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## **B.Sc. Data Sciences Program (Under Choice Based Credit System)**

### **Introduction:**

Data science, also known as data-driven science, is an interdisciplinary field about scientific methods, processes, and systems to extract knowledge or insights from data in various forms, either structured or unstructured data from various sources by high end algorithms and the tools.

### **About this Course :**

**B.Sc. Data Sciences** is a 3 years Non-medical Program consist of 5 regular semesters & 6 months internship during the final year. This program is offered under Choice based Credit system (CBCS) with a total number of **130** credits.

**INTERNSHIP:** On successful completion of all the 5 semesters, the students will have to complete Internship Training in Department /Organization / Hospital/Company, for a period of 6 months as a part of the course. Hospitals/appropriate center will be allotted by the Director/HoD at the end of 5<sup>th</sup> semester. Degree will be awarded only after the completion of Internship. The Department will collect the required Internship Completion Certificate from the concerned Hospital/Department/Company and it will be passed on to the University

### **Course Description**

This **B.Sc. Data Sciences**, specialization training course that provides you detailed learning in data science, data analytics, project life cycle, data acquisition, analysis, statistical methods and machine learning. Apart from that, this course will give you an in-depth understanding of Business Analytics and Big Data using tools like SAS, Hadoop, Python etc.,. In addition, this course will helps you understand certain skills such as high end data mining tactics, Data exploration, visualization, and hypothesis testing. In a nutshell, its extremely hands-On and Incredibly Practical innovative program.

This course will give you a full overview of the Data Science journey. Upon completing this course, you will know, how to clean and prepare your data for analysis, then how to perform basic visualization & model your data apart from , how to curve-fit your data and finally, how to present your outcome.

### **Job Opportunities :**

Demand for Data Analytics jobs is predicted to increase over the next decade. After completing the course, students may join in job descriptions such as Data Scientist, Big Data Experts , Data Base expert, Data Analyst. Business Intelligence Analyst, Program Analyst etc... Moreover, Completing an Internship in the final year, will also boost their competency and can add additional choices in choosing the job Profile by the students.

Apart from the above, students are also eligible to proceed to PG programs such as Data Sciences, Bioinformatics, Medical Bioinformatics , Clinical Informatics, Applied Informatics and Other interdisciplinary domains.

### **PROGRAM SUMMARY**

#### **B.Sc. Data Sciences**

1. The 3-year **BSc-Data Sciences** program includes class room and laboratory teaching for the first 2½ years and an internship for the last 6 months , with a total of 130 credits
2. This program is for 6 semesters i.e., 2 Semesters / year. At the end of 5th semester the student will have to undergo an internship program , rotated to various Organizations/ Departments / Labs.
3. Total of 35 courses which comprises of core theory, practical, electives and skill enhancement courses and internship in the final semester will earning a total of 130 credits in three years..
4. At the end of the 2<sup>nd</sup> year students will be rotated to various departments/Organisation to get trained in different sub domains of Data Sciences.
5. Each semester has 100 working days.
6. The grade system indicates a 10-point scale of evaluation of the performance of students in terms of grades and grade point.
7. Grade point average (GPA) and Cumulative grade point average (CGPA) will be declared as per the CBCS.
8. The Degree of B.Sc. Data Sciences will be awarded after successful completion of Internship at the end of programme.

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## **B.Sc. (Hons.) Environmental Health Sciences**

**[Under Choice Based Credit System]**

### **INTRODUCTION**

Environmental health sciences program focuses on human health that is linked to the interaction between living and environmental conditions. There must be a balance between the human development and the preservation of nature. The exponential growth in human development ultimately ends up with exploitations of natural resources after meeting the human demands. Subsequently, this leads to severe degradation of the environment, endanger of life of plants and animals, changes in landscape and climate, depletion of essential resources such as water and food. Environmental health sciences are linked with biological, non biological, physical, social and technological features integrating multiple disciplines. According to the international organization, Environmental health discipline is often considered to be focusing on disease prevention. With no further knowledge on science interface with other disciplines, there cannot be a complete understanding of the subject. There is a strong need to train students in these core areas, who in turn can work to preserve nature and improve the quality of environment fostering both the people and environment for sustainable growth.

The department of EHE has been offering post graduate programs in public health (MPH) and industrial hygiene & safety (M.Sc.) for more than 8 years, and has been instrumental in bringing together academicians and eminent professionals from different government/non-government organizations, in the process of quantifying various environmental parameters and their health impacts. This led us to realize the lack of a multidisciplinary training in this area at the undergraduate level. Hence, this 4-year B.Sc. (Hons) Environmental Health Sciences (BEHS) provides a profound theoretical and practical knowledge in air quality, water quality, food quality, ecology, environmental health and chemistry, basic physics, microbiology, biochemistry, public health, atmospheric chemistry, interaction of human physiology and body systems with environmental exposures, toxicology and diseases, social and human behavior and environmental management systems. This course also provides an overview of the requirements of current legislation and standards pertaining to environmental health. Foundation teaching will be covered in the first three years and beginning of year four, the students will start their laboratory/field rotations. The students will be rotated to laboratories, governmental and nongovernmental organization for gaining practical training on water quality, air quality and food quality testing procedures, essentials of maintaining the toxicity testing laboratories, environmental conservation and disease surveillance. During the field or laboratory rotation, the students will be offered hands-on experience on using modern equipment and techniques to analyze physical and biological parameters. This program lays strong foundation to the students for preparing themselves as leader s environmental health sciences.

### **SCOPE**

After completing the under graduation, the students can join other Universities both in India and abroad for higher studies in environmental sciences, public health, molecular biology, biotechnology, bioinformatics, human genetics and other life science programs. The student who completes this program will be skilled technologist in water, air food quality testing, disease surveillance and environmental management and conservation and will be able to take a technologist job.

Undergraduate students of the BEHS are trained in the fundamentals of environment and its impact on health. Hence, such students possess the training and expertise to become highly skilled technologist in water, air, food quality testing, disease surveillance and environmental conservation. The need for such expertise and training has been increasing in industries and laboratories, either in government or private sectors, which are involved in testing environmental parameters, disease surveillance and environmental conservation. These interdisciplinary environmental biologists can also progress vertically.

## HIGHLIGHTS

B.Sc. (Hons) Environmental Health Sciences is a semester based CBCS curriculum program offering 170 credits.

**Duration:** 4 years including one year internship.

## PROGRAM SUMMARY

### B.Sc. (Hons) Environmental Health Sciences

1. The 4-year BEHS program includes class room and laboratory teaching for the first 3 years and an internship and a mini project for the last 1 year, with a total of **170 credits**
2. This program is for 8 semesters *i.e.*, 2 Semesters / year. At the end of 6<sup>th</sup> semester the student will be rotated to various laboratories.
3. Total of 48 courses which comprises of core theory, practical, electives and skill enhancement courses earning a total of 140 credits in three years. In the fourth, final year, 30 credits during internship and mini project can be earned to give a total of **170 credits** for this degree program.
4. At the end of the 3<sup>rd</sup> year students will be rotated to various departments to get trained in environmental monitoring and analysis.
5. Each semester has 100 working days.
6. The grade system indicates a 10-point scale of evaluation of the performance of students in terms of grades and grade point.
7. Grade point average (GPA) and Cumulative grade point average (CGPA) will be declared as per the CBCS.
8. The Degree B.Sc. (Hons) Environmental Health Sciences will be awarded after successful completion of laboratory rotation at the end of 4 years.

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## **FACULTY OF CLINICAL RESEARCH**

### **B. Sc. CLINICAL RESEARCH (Under Choice Based Credit System)**

#### **INTRODUCTION**

- Clinical research is a branch of medical science that determines the safety and effectiveness of medications, devices, diagnostic products and treatment regimens for humans.
- India is making a remarkable development in the field of Clinical Research and there is a massive demand for the clinical research professionals in this fast growing field.
- Education and training in Clinical Research and manpower development is in demand for the Pharma / Biotech industries, Clinical Research Organisations, Medical Colleges and Universities.

#### **SUMMARY OF THE PROGRAM**

- B.Sc. Clinical Research program is a three years program under the Choice Based Credit System with six semesters.
- Each year is of two semesters with 25-28 credits in semesters I to V, 15 credits in Semester VI, to 150 credits in 3 years.
- The program comprises a total of 53 courses including 35 theory courses, 15 practical courses, two training courses and 1 internship course in a clinical trial setting.
- Elective course(s) option available for selected students as per their aptitude.

## **B.Sc (Applied Psychology)**

### **Preamble**

Psychology as an academic discipline that has bright prospect in the contemporary world and is emerging as a discipline of excellence. The need for Psychological help in various walks of life especially from the qualified fraternity is increasing as never before. Applied Psychology is particularly concerned with psychology relevance to a range of everyday issues such as health, education, technology, and neuropsychological rehabilitation. The course structure is reflective of the same with courses and projects throughout the duration which require mastery of the subject. The syllabi for B.Sc. Applied Psychology based on Choice Based Credit System (CBCS) have been designed in such a manner to encourage students with aptitude, interest and skills to join for graduate programs in Psychology and to build up a work force of competent psychologist within the public reach. This course aims to develop a holistic and multidimensional understanding of the topics. It attempts to approach new areas of learning, develop competencies in the students thereby opening various avenues for self-discovery, academic understanding and employment. To this end, practicum is incorporated as an important component in many of the papers. Use of ICT and mass media and web based sources is highly recommended to make the teaching learning process interactive and interesting. Along with routine examinations, classroom participations, class assignments, project work, and presentations would also be a part of the overall assessment of the students.

They have a wide range of job opportunities like Welfare organizations, the advertising industry, colleges, defence forces, hospitals, community and mental health centres, prisons and correctional programs and institutions, counselling, child care, rehabilitation centres, youth guidance etc.

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## 2. ELIGIBILITY:

- (a) Should have studied in a recognized School and passed H.S.C. Examination (**Academic Stream of 10+2 curriculum**) of any State Board/CBSE/ISC (or) any other examination recognized as equivalent thereto, with the group of subjects specified below and obtained the minimum eligible marks prescribed by this Deemed University.
- (b) Candidates who are appearing for HSC (+2) or equivalent examination in March / April 2020 are also eligible to appear for the Interview subject to condition noted under Important note (ii) below

<b>Programmes</b>	<b>Group of subjects specified</b>
B.Sc.(Hons) Sports and Exercise Sciences B.Sc. (Trauma Care Management)	Passed the HSC with the subjects of English, Physics, Chemistry and Biology or (Botany & Zoology)/ Mathematics
B.Sc. Clinical Nutrition	Passed the HSC with Nutrition and Dietetics/ Home science/Basic science subjects with English, Physics Chemistry, Botany & Zoology/ Biology and /or Mathematics/ Computer Science.
B.B.A. Hospital and Health Systems Management	Pass in HSC or Equivalent
B.Sc. (Hons) Medical Microbiology and Applied Molecular Biology	English, Physics, Chemistry, Mathematics and Biology (or) English, Physics, Chemistry, Biology or Botany & Zoology (or) English, Physics, Chemistry, Microbiology/ Biochemistry/Biotechnology.
B.Sc. Bioinformatics	Candidate should have passed HSC(+2) or equivalent examination with one of the following subject combinations:-  i) English, Physics, Chemistry, Biology, Mathematics. (or) ii) English, Physics, Chemistry, Botany and Zoology. (or) iii) English, Physics, Chemistry, Mathematics, Computer Sciences.
B.Sc. Health Informatics	
B.Sc. Data Sciences	
B.Sc. (Hons) Environmental Health Sciences	Candidate should have passed HSC(+2) or equivalent examination with one of the following subject combinations:  i) English, Physics, Chemistry, Biology and Mathematics (or) ii) English, Physics, Chemistry, Botany and Zoology.
B.Sc. Applied Psychology	English, Physics, Chemistry, Mathematics and Biology (or) English, Physics, Chemistry, Biology or Botany & Zoology/Home Science.
B.Sc. Clinical Research B.Sc.(Hons) Medical Laboratory Technology	English, Physics, Chemistry, Biology or Botany & Zoology.

**Important Note:**

- (i) Candidates belonging to any State/Union Territory of India only are eligible.
- (ii) Candidates who are appearing for the H.S.C.(+2) or equivalent Examination in March/April, 2020 **should submit a photocopy of the H.S.C.(+2) mark statement, immediately on its receipt** to this Deemed to be University either in person or by speed post, courier service. At the top of the H.S.C. mark statement copy, the candidates should write their "Interview Call Letter Registration Number" assigned to them by this Deemed University.

**3. ELIGIBILITY CERTIFICATE:**

Candidates who have passed qualifying examination other than H.S.C. (+2) (Academic Stream) Examination of Tamil Nadu, Board of Higher Secondary Education should obtain Eligibility Certificate from Sri Ramachandra Institute of Higher Education & research (Deemed to be University), Porur, Chennai 600 116 and produce it at the time of admission.

**4. AGE LIMIT :**

Candidates should have completed 17 years of age as on 31st December, 2020. Date of birth entered in the Mark Statement of HSC/CBSE/ISC or its equivalent Examinations or in the Birth Certificate or Passport shall be taken for computing the age of the candidates.

**5. FILLING ONLINE APPLICATION FORM AND ATTACHING SELF ATTESTED COPY OF CERTIFICATES:**

Application forms are available online only which should be filled in carefully by candidates, complete in all details and submitted online along with scanned copies of documents and Photograph as attachments. ( listed elsewhere in this prospectus).

- (a) The Registration fee of **Rs.1,000/-**(Rupees One thousand only) will not be refunded under any circumstances.
- (b) Candidates **should attach only scanned copies of Self attested certificates** relating to qualification, age and community such as HSC Mark sheet(s), HSC Hall Ticket, Birth Certificate etc. **The original Mark Sheet(s) of the qualifying examination and other original documents have to be produced only at the time of interview.**
- (c) Application will not be accepted if incomplete or uploaded without attaching the relevant certificates and without paying the application fee online.
- (d) Candidates who have appeared for the HSC(+2) Examination in March/April, 2020, but results not declared, should attach a scanned copy of the HSC(+2)/equivalent exam Hall ticket while submitting online application form.

## 6. INTERVIEW CALL LETTER:

- (a) Interview Call Letter can be downloaded by all eligible candidates from the website one week prior to the Interview date.
- (b) INTERVIEW CALL LETTER MUST BE PRODUCED AT THE TIME OF INTERVIEW WITHOUT FAIL. NO CANDIDATE SHALL BE ALLOWED TO ATTEND THE INTERVIEW WITHOUT THE CALL LETTER.
- (c) Mere acceptance of a person as a candidate for Interview shall not confer on him/her any right/eligibility for admission. The name of the candidate who does not satisfy the prescribed eligibility criteria shall not be considered for admission.
- (d) All candidates appearing for an interview shall be required to sign an attendance register to record and authenticate their presence.

## 7. INTERVIEW CENTRE:

The Interview will be conducted at **SRI RAMACHANDRA INSTITUTE OF HIGHER EDUCATION AND RESEARCH (Deemed to be University)**, Porur, Chennai - 600 116. The candidates have to appear for the Interview at their own expenses.

## 8. DATE OF INTERVIEW:

The interview will be conducted on **02.09.2020 (Wednesday) & 03-09-2020 (Thursday) from 10.00 a.m. onwards.** The candidates are advised to be at the Interview Centre an hour before the commencement of the Interview.

## 9. MODE OF SELECTION:

- (a) Selection will be made on the basis of the marks secured by the candidates in the Interview. Intimation letter will be sent to the candidates provisionally selected for admission.
- (b) Results will be published in the Notice Board and also in the Deemed to be University website **www.sriramachandra.edu.in**
- (c) Selected candidates will be intimated individually through e - mail.

## 10. IMPORTANT NOTE:

- i. All admissions are subject to fulfillment of all the eligibility conditions by the candidate. If it is found at a later stage, that the candidate has given false information/forged certificates or concealed material information, his/her admission will be cancelled without any notice.
- ii. The Deemed to be University reserves the right to change the curriculum, course structure and the rules relating to admission, examinations, fee structure, refunds, etc.
- iii. All disputes arising in the interpretation and implementation of the provisions in this prospectus will be referred to the Vice-Chancellor of this Deemed to be University and Vice-Chancellor's decision shall be final and binding.

- iv. In respect of matters relating to or arising out of this prospectus the jurisdiction shall lie in Chennai alone.

#### **11. DEPOSIT OF CERTIFICATES:**

Verification of original certificates will be made at the time of admission. Candidates provisionally selected for admission will have to deposit all required original certificates with the office. Therefore, candidates are advised to keep with them enough number of attested photocopies of their certificates.

#### **12. CHANGE OF NAME/DATE OF BIRTH:**

The name and date of birth of the candidate will be registered in the records of the University as given in the HSC Mark Statement/Transfer Certificate. No request will be considered later in regard to change of date of birth or correction in the name of the candidate. The parents and candidate are requested to verify and confirm these entries in the HSC Mark Statement/Transfer Certificate at the time of receipt of the same.

#### **13. PAYMENT OF TUITION AND OTHER FEES**

1. Every student shall pay tuition fee and other fee, as prescribed by the Deemed to be University, within the due date notified. The fees are subject to revision as per rules of the Deemed to be University.
2. All fees, once paid to the Deemed to be University account, will not be refunded or adjusted for any other purpose under any circumstance.

#### **14. RULES FOR DISCONTINUANCE FROM COURSE OF STUDY**

1. Where any student applies for discontinuance, or without any application discontinues on his/her own, from the course to which he/she has been admitted to, for any reason, either after the cut-off date prescribed by the statutory authorities for admission to the first year of the course concerned or where the seat is rendered vacant without having any chance of being filled up with any other candidate from waiting list etc., such students will have to remit the tuition fee and other applicable fees for the 'entire/remaining course period'. Unless and until payment of all the prescribed fees for the entire/remaining course period is made to the Deemed to be University account, such student shall not be entitled to any certificate including transfer certificate, mark sheets etc., to be issued by the Deemed to be University and to get back his/her original certificates deposited with the Deemed to be University at the time of admission.
2. All students and parent will be required to furnish a declaration agreeing to the above said conditions at the time of admission.

**15. MEDICAL EXAMINATION:**

The candidates provisionally selected for admission will have to undergo a medical examination at Sri Ramachandra Institute of Higher Education and Research (Deemed to be University ), Porur, Chennai - 116 and only those who are found medically fit will be admitted to the course concerned.

**16. CHECK LIST:**

Please ensure whether the following certificates (**self attested scanned copies only**) have been attached along with the duly filled in application submitted online:-

- i. Photocopy of the H.S.C. (+2) equivalent examination Hall Ticket, if appeared for H.S.C. or equivalent Examination in March/April 2019;
- ii. Mark statement(s) issued by (State Board/CBSE/ISC or any other equivalent authority) if already passed +2 Examination;
- i. Birth Certificate for proof of age (if date of birth is not given in the Mark Statement/ HSC Hall Ticket);
- iv. Community Certificate in the case of SC/ST or BC/OBC candidates.

**17. LAST DATE:**

- (a) Application Form duly filled in with all attachments should be submitted online ON OR before **26.08.2020 (Wednesday)** up to 5.30 p.m.
- (b) The Deemed to be University shall not be liable for any delay arising out of internet technical issues. Hence candidates are advised to file online applications well in advance.

**REGISTRAR**