PROGRAM HIGHLIGHTS

- The B.Sc. (Hons) Biomedical Sciences course comprises of 8 semesters, 53 papers, project work and clinical rotation.
- Students **specialise** in one of the majors (Bioscience, Bioinformatics, Biotechnology and Human Genetics) at the final year of the program.
- The university practices **semester system** with continuous evaluation throughout the semester by conducting tests, seminars, group discussions, models, case studies, assignments.
- Individual **project** assigned to students in the eighth semester which include experimental work, data collection, and presentation of the project.
- Students are encouraged to carry out research under '**Chancellor Summer Research Fellowship**'.
- Students are encouraged to participate and present posters and papers at National and International conferences.

ABOUT THE DEPARTMENT

The Department was instituted in 2007. An aesthetically designed phenomenal infrastructure with an array of research equipments like Inverted microscope, Upright Florescent microscope, Zoom microscope, UV Vis spectrophotometer, HPLC, Gas chromatography, IR spectrophotometer.

DEPARTMENTAL FACILITIES

- Animal cell culture lab
- Drosophila lab
- Molecular Biology lab
- Instrumentation facility
- Microbiology lab
- Proteomics lab
- Stem cell lab
- Zebra fish lab

First Year - First Semester

Category	Course title	Credits
Coure Course - 1	Basic Plant & Animal Biology + Practical	4+1
Coure Course - 2	Biochemistry + Practical	4+1
Coure Course - 3	Environmental Science & Toxicology + Practical	3+1
Discipline Specific Elective Theory -1	Human Anatomy + Practical	3
Ability Enhancement -1	English	2
Skill Enhancement - 1	To be chosen by student	2

First Year-Second Semester

Category	Course title	Credits
Core Theory - 4	Human Physiology+ Practical	4+1
Core Theory - 5	Basic Microbiology + Practical	4+1
Core Theory - 6	Molecular Cell Biology+ Practical	3+1
Discipline Specific Elective Theory -2	General Chemistry+ Practical	3+1
Generic Elective - 2	To be chosen by student	3
Ability Enhancement -2	Mathematics	2
Skill Enhancement - 2	To be chosen by student	2

Second Year-Third Semester

Category	Course title	Credits
Core Theory - 7	Medical Genetics+ Practical	4+1
Core Theory - 8	Developmental Biology+ Practical	4+1
Core Theory - 9	Endocrinology+ Practical	3+1
Discipline Specific Elective Theory -3	Molecular Pathology+ Practical	3+1
Generic Elective - 3	To be chosen by student	3
Ability Enhancement -3	Communication & Soft Skills	2
Skill Enhancement - 3	To be chosen by student	2

Second Year-Fourth Semester

Category	Course title	Credits
Core Theory - 10	Molecular Biology+ Practical	4+1
Core Theory - 11	Bioprocess Technology+ Practical	4+1
Core Theory - 12	Enzyme Technology+ Practical	3+1
Discipline Specific Elective Theory -4	Pharmacology+ Practical	3+1
Generic Elective - 4	To be chosen by student	3
Ability Enhancement -4	Biostatistics	2
Skill Enhancement - 4	To be chosen by student	2

Third Year-Fifth Semester

Category	Course title	Credits
Core Theory - 13	Recombinant DNA Technology+ Practical	4+1
Core Theory - 14	Molecular Immunology+ Practical	4+1
Core Theory - 15	Cancer Biology+ Practical	3+1
Discipline Specific Elective Theory -5	Computing and web applications+ Practical	3+1
Generic Elective - 5	To be chosen by student	3
Ability Enhancement -5	Laboratory Safety Measures	2
Skill Enhancement - 5	To be chosen by student	2

Third Year-Sixth Semester

Category	Course title	Credits
Core Theory - 16	Tissue Engineering + Practical	4+1
Core Theory - 17	Biophysics and Bioinstrumentation + Practical	4+1
Core Theory - 18	Basic Bioinformatics + Practical	3+1
Discipline Specific Elective Theory -6	Molecular Epidemiology + Practical	3+1
Generic Elective - 6	To be chosen by student	3
Ability Enhancement -6	Management Principles	2
Skill Enhancement - 6	To be chosen by student	2

Fourth Year-Seventh Semester

Category	Course title	Credits
Core theory -19	Research Methodology	3
Elective department – Biomedical Sciences core course	Clinical Biochemistry + Practical Advance Biomaterials + Practical Stem Cell and Regenerative Medicine + Practical	3+1 3+1 3+1
Elective department – Human Genetics core course	Prenatal & Pre-implantation Genetics + Practical Radiation Genetics + Practical Advanced Molecular biology and biotechnology + Practical	3+1 3+1 3+1
Elective department – Biotechnology core course	Biology of Non-Coding RNAs + Practical Model Organisms in Biomedical Research + Practical Environmental Biotechnology + Practical	3+1 3+1 3+1
Elective department – Medical Bioinformatics core course	Bioinformatics Tools + Practical Genomics and Proteomics + Practical Perl for Bioinformatics + Practical	3+1 3+1 3+1

Fourth Year-Eighth Semester

Category	Course title	Credits
Clinical Rotation	Clinical Rotation	3
Research Project	Project	8
Elective department – Biomedical Sciences core course	Pharmaceutical Biotechnology + Practical	3+1
Elective department – Human Genetics core course	Transplant Immunology & Antibody + Practical	3+1
Elective department – Biotechnology core course	Phytomedicines + Practical	3+1
Elective department – Medical Bioinformatics core course	Molecular Modeling + Practical	3+1

WHAT THE ALUMNI SAY

The BMS course helped us learn a lot. The extensively designed curriculum gave me an insight on the various higher education possibilities.

Bhuvaneswari, 2007 batch
M.Sc. BMS, Nottingham Trent University

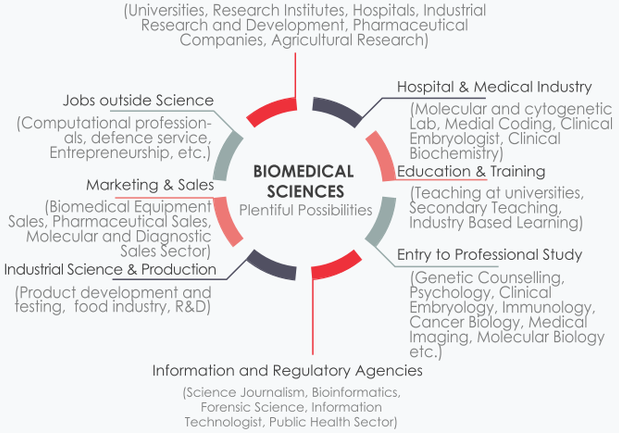
The course gives students enough time to learn through the basics and have a strong foundation before entering into advanced topics. The specialization in the final year of the course really helps students in taking a step closer to their field of interest.

Nivedita, 2008 batch
M.Sc. Immunology, Oxford University

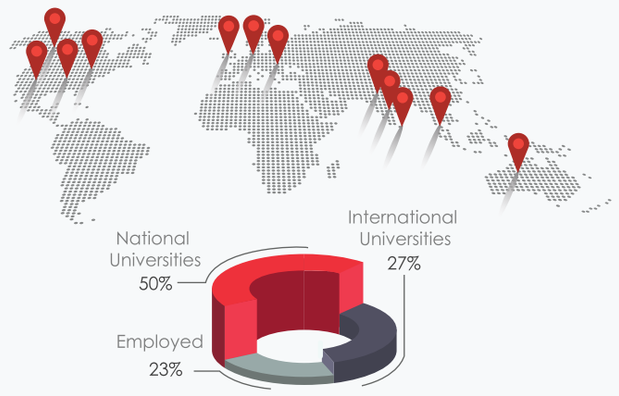
I have been offered a one-year Teaching Assistantship as well as the Biochemistry Presidential Doctoral Research Fellowship based on my academic performance in my UG program. The curriculum and resources at the department helped me learn a wide range of subjects and explore all the possibilities in the field of biology and research.

Mathangi. S, 2013 batch
PhD program at Utah State University,U.S.A

CAREER EXPLORATIONS



Student Placement



Scope for Biomedical Graduates - Higher Education

ABOUT SRI RAMACHANDRA MEDICAL COLLEGE & RESEARCH INSTITUTE

Sri Ramachandra Medical College & Research Institute is dedicated to excellence in education, healthcare and research since its inception in 1985 by it founder Shri.N.P.V.Ramasamy Udayar. An internationality acclaimed medical school is supported by seven multidisciplinary constituent faculties – Dental, Nursing, Pharmacy, Physiotherapy, Allied Health Sciences, Management & Biomedical Sciences.

WHY SRI RAMACHANDRA MEDICAL COLLEGE & RESEARCH INSTITUTE

Sri Ramachandra Medical College & Research Institute apart from providing world class education helps in building a well rounded personality and provides ample opportunities for students to develop into responsible leaders and dynamic professionals in their careers.

WHO CAN BENEFIT FROM THIS DEGREE?

We are looking for students who have a strong desire to understand fundamentals of Basic Medical Sciences and aspire to be leaders in Biomedical research and development.

ELIGIBILITY

Students who have qualified HSC/CBSE/ISC or equivalent examination with one of the following subject combinations:

1. Physics, Chemistry, Biology, Mathematics
2. Physics, Chemistry, Botany, Zoology
3. Physics, Chemistry, Biology (with any other subject)

A candidate should have completed 17 years as on 31st December of the year of admission.

For More Details:
The Registrar
Head of the Department: 044-24768027,31-33 Extn: 3710/8296
Email: hod.bms@sriramachandra.edu.in
www.sriramachandra.edu.in

SRI RAMACHANDRA
Medical College & Research Institute
(Deemed to be University)
Porur, Chennai – 600 116.

B.Sc.(Hons) BIOMEDICAL SCIENCES

WHY BMS

Biomedical Sciences course provides a strong foundation to pursue academic research, work in the R&D labs, basic computational sectors, or apply for an accelerated post graduate entry course.

Doctoral

The mission of the Biomedical Sciences program is to provide a predoctoral educational experience that will train experimentalists and scholars for a wide range of careers in R&D and Universities.

Masters

B.Sc. Biomedical sciences facilitates higher education opportunities for specialised master program offered at National and International universities.

Bachelors

The course aims to meet the recent challenges in science and provide students with a well- rounded education. The course has been designed with intensive curriculum.

Schooling

We are looking for students who have a strong desire and aspire to contribute to Biomedical research.

Inspire, Analyse, Explore