

DEPARTMENT MANUAL

Department of Electronics 2015-2016

M S RAMAIAH COLLEGE OF ARTS, SCIENCE AND COMMERCE

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FOREWORD

The Department of Electronics takes pleasure in placing the Department manual 2015- 2016 in the hands of the students of the department, their parents and other stakeholders. We earnestly hope that the manual is useful and informative to all who use it.

The manual provides details about the course, the department, the faculty, the students, the convergence of all these towards trying to create human resource of good caliber for the country. In the process, the college, the department and the students are taken towards excellence, because every ongoing day is a day of learning, not only for the students but also for the college and its academic community.

There are several instances of University Rank holder and centum mark scorers in this course.

As we welcome you, we wish you to march towards success during your stay in the college.

HoD and Faculty of Electronics department

THE COLLEGE AND THE DEPARTMENT

The college was founded by Illustrious Dr M S Ramaiah and it is now under the governance of the Directors, Honorable Sri M R Janakiram, Honorable Sri M R Kodandaram, Respected C E Sri S M Acharya and the Principal Dr A.Nagarathna. The department was established in the year 1994 as Physics department. The department now offers under graduate course (BSc) in Electronics. The course follows the semester pattern prescribed by the Bangalore University. The duration of the course is three years that is divided into six semesters. The curriculum followed is as per the revised (2014) syllabus of Bangalore University. The odd semester starts roughly from June and the even semester starts from January normally, however there can be changes as per the Bangalore University schedule. Each semester must have minimum ninety working days. There are two internal examinations in each semester. The semester long schedule about the classes, exams, the syllabus, the books etc are provided to the students in the beginning of the semester.

In accordance with the revised syllabus, laboratory and library have been updated. In addition to the Central library, department library lends books to the students. The department has got well established spacious laboratories to provide good lab facility. The BSc course is designed to prepare individuals who are technically sound and capable of fitting into the modern IT and Electronics environment in the present industry scenario.

Good placement opportunities are provided for the students in various companies. Department organized various industrial visits to BHEL, Vainu Bappu observatory at Kavalur, Raman research centre, IISc etc. Several students who have passed out are working in various companies like Wipro, Infosys,

SLK software ltd, Tech Mahindra, HCL, Indian Institute of wood and Science technology, I gate, SAP labs etc. Some are pursuing their higher studies in various institutions in India and abroad. The college has placed the students of this course in various companies like Wipro, I Gate, CSC, IBM, Infosys, SAP labs, Tech Mahindra etc.

Add on courses on Cloud computing in collaboration with Jetking, Hardware Description Language, Basic Electronic Simulation using MATLAB, PCB Design using software etc have been conducted for the students and certificates have been issued.

COURSE OFFERED BY THE DEPARTMENT

The department offers BSc course in Electronics, Mathematics & Computer Science. The curriculum includes Language, English and the three core subjects in the first four semesters and the three core subjects only in the last two semesters.

FLEXIBILITY AND ENRICHMENT

It is the practice of the department to offer Add-on course to provide enrichment. Courses on UPS Verilog programming and Cloud computing are examples of such Add-on courses. The curriculum followed is prescribed by the Bangalore University and in the BSc course there are no optional subjects. Hence flexibility of optional subjects is not provided. However, flexibility with respect to the duration of completing the BSc is provided, especially for slow learners. Guest lectures are conducted to expose the students to renowned resource persons. In the sixth semester, the students should prepare a working electronic project. The project adds enrichment as it instills skill, knowledge and ability to work in teams. The department organizes visits to places of relevance for electronics, thereby providing enrichment.

FACULTY PROFILE

S no	Name of the faculty	Designation	Qualification	Area of Specialization	Member of committee in MSRCASC
1	Prof. T E Kanakavalli	Vice principal & HOD	MSc, MPhil B.Ed, SLET	Nuclear Physics and Electronics	IQAC coordinator, Member in all the committees
2	Mrs.J. Nesa Sudha	Reader	MSc, PGDCA	Quantum Mechanics	Placement, Alumni
3	Mrs Rashmi B	Lecturer	MSc	Electronics	Proctor, Value added courses, Cultural, Attendance

VISION

• To attain the status of center of excellence in the field of Electronic Science and allied fields

MISSION

- To impart quality education to meet national challenges.
- To blend theoretical knowledge with practical skills.

OBJECTIVE

- To familiarize the fascinating world of Electronic technology to young minds.
- To develop skill and knowledge in the field of Electronics in the learners.
- To inculcate good human values and necessary soft skills along with curriculum.
 - To help the learners in transforming to multifaceted personalities

POLICIES OF THE DEPARTMENT

- Attendance: According to Bangalore University norms, 75% attendance is mandatory for the students to take Bangalore University examinations. In case of health problems, medical certificate from a recognized doctor should be submitted on time and attendance will be considered accordingly.
- ➤ Internal Assessment: According to Bangalore University rule, Internal Assessment is allotted to students in all individual subjects. Two internal tests are conducted in every semester. Equal weightage is given to attendance and internal marks in deciding the Internal assessment marks.
- ➤ **Proctor System:** The department facilitates the students through the proctor system. The proctor is a faculty and about thirty five students are under the proctorship of a faculty. The proctor can be approached by the students for help or guidance. The letters are posted to parents or guardian once in every semester regarding the student's performance and attendance. Phone calls are made to parents or guardian, if need arises.
- ➤ Parent teacher meeting: It is the practice in the department to conduct parent teacher meeting once in every semester. Parents or guardian are requested to meet the respective proctor without fail. They are further

requested to make phone call to respective proctor or HOD to know the student's performance.

- ➤ **Department Library:** Department has a library with more than 150 books. In addition to central library, the department library also lends books to the students for a span of two weeks.
- Instructions regarding the lab: Department has a well equipped laboratory and is updated according to the requirement of the syllabus. The department has two computers with Internet facility. Lab manuals are prepared by the department and are provided to the students during practical sessions. The soft copies of the same are available on line. The students are responsible for the instruments while doing the experiment. If any instrument is damaged the respective student should bear the repair cost.
- ➤ **Projects:** The students undertake projects in Electronics during their sixth semester. The projects are guided by the department faculty. The projects are based on microcontroller, microprocessor, verilog and Integrated circuits. Some projects are presented by the students during Inter collegiate Electronic fests.
- **Examinations:** The Practical and theory exams will be conducted according to Bangalore University norms.

RULES AND RESPONSIBILITIES OF THE STUDENTS

The students have to strictly follow the rules of the college. In addition the department has rules, which the students have to follow.

- Punctuality should be maintained.
- Minimum 75% attendance is mandatory for the students.
- Discipline should be maintained in the laboratories.
- Use of mobile phones is strictly prohibited in the college premises.
- Lab equipments should be handled by the students carefully during lab hours.
- If any instrument is damaged the respective student should bear the cost.
- Assignments have to be submitted on time.
- The books borrowed from the department library should be returned on time.
- Students should behave in a proper manner within the college campus.

INSTRUCTIONS TO PARENTS AND GUARDIANS

- ❖ The parents or guardians should be aware of their ward's progress in academic and non academic activities.
- ❖ The response for the proctor letters should be sent by the parents or guardians in the form of acknowledgement.
- ❖ The parents or guardians should visit the department once in every semester or a phone call should be made to the respective proctor or HOD to know their ward's progress.
- * The annual fee payment should be made within the specified time.
- Parents are requested to send students to college on reopening day after vacation and not in delayed manner.
- ❖ Insist for a receipt from the college whenever your ward makes payment to the college.
- * Written permission for the study trips from the parents is essential.

DEPARTMENT'S SOCIAL RESPONSIBILITY

- The department provides funds for various registered organizations like CUPA every year out of the finance generated by the department.
- Students are advised to practice eco friendly environmental habits. As per the oath taken by the students, un painted Ganesha idols are installed every year in their house and in the college during celebrations.
- Department has collected e-waste from the college and given it to E Parisaraa an e-waste processing organization.
- The department encourages the students to join NSS and serve the needy.
- Electronic projects that relate to environment have been carried out.
- Creating awareness about Ozone layer protection(September), Prevention of Cancer(February), Wild life conservation(October)