ROBOCEK

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About

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Robotics interested group, Govt College of Engineering, Kannur

A group of students of 2013 -2017 batch took the initiative for the improvement of Robotics activities in our college as we were inspired by the robtics workshop conducted by NIT Calicut which was held on the month of august ,organized by the Association of mechanical engineering .We designated our name as **ROBOCEK Robotics interested group, Govt College of Engineering, Kannur** and it was officially launched by our respected principal ,Dr. V. Shyam Prakash .

The group strength is 23 and planning to offer membership to the interested students in the subsequent years. We had started our small projects since august 2013 and now completed almost 6 main projects and some sub projects.

Main projects include

- ➤ LED cube [64 LEDs makes up this 4x4x4 cube, controlled by an Atmega8 microcontroller. Each LED can be addressed individually in the software, enabling it to display amazing 3D animations!]
- ➤ Line follower [Line follower is an autonomous robot which follows either black line in white area or white line in black area.]
- ➤ Obstacle avoidance robot (using ultrasonic sensor) [An obstacle avoiding robot automatically sense and overcome obstacles on its path]
- ➤ **DTMF decoder robot** [the robot is controlled by a mobile phone that makes a call to the mobile phone attached to the robot and hence does not require the construction of receiver and transmitter units.]
- ➤ Bluetooth controlled robot [Allows your target device to both send and receive the TTL data via Bluetooth technology without connecting a serial cable to your computer].

Team Organizational Chart

- 1. President
- 2. Vice President
- 3. Secretary
- 4. Treasurer
- 5. Head of circuit design
- 6. Head of Mechanical design
- 7. Head of Programming
- 8. Head of Project Management
- 9. Head of publicity and webmaster

Bylaws

I. Name

Official name recommended as **ROBOCEK** ,ROBOTICS INTERESTED GROUP COLLEGE OF ENGINEERING KANNUR

II. Purpose

The purpose of these bylaws is to ensure the successful implementation of the mission and purpose of the ROBOCEK. These bylaws shall be established as the official governing document for the ROBOCEK. However, in the event that any policy in this document represents a conflict with a higher policy, such as that of Government policy, college rules and regulations, the higher policy shall take precedence over this document.

III. Mission

The ROBOCEK is an official Robotics interested group, Govt College of Engineering, Kannur

The mission of the robocek is to promote student learning in the fields of science, technology, engineering, mathematics, and marketing through hands-on team projects and collaboration with adult mentors and advisors who have experiences in their field of interest .We have potential and engaging in other activities that fulfill its purpose. The ROBOCEK may also participate in any other activities permissible to clubs and student organizations of GCE,KANNUR .

IV. Membership

a. Eligibility

The club membership will be drawn primarily from the body of full-time students and the aluminis in GCE, Kannur.

b. Recruitment

The faculty club advisor, with the consent of the club's executive committee determines the potential student'and recruit them into the group.the numbers should not exceed a limit which leads to administration unbalance

c. Resignation

Members who no longer wish to participate in club activities may submit a request to the advisors to withdraw his or her information from the team roster. The advisors must comply when notified provided that the resigning member ceases to participate.

d. Dismissal

The recruited member can be dismissed ,when she/he became a burden to the group and its other members by the executive committee or by the advisors in charge .

V. Advisors

a. Positions

The club shall be overseen by at least five faculty advisors at all times during the academic year. An official lab custodian is appointed for the proper accounting of the finished projects and other equipments.

A staff in charge for the club is elected from the staff advisers for an year during governing body election.

THE PRINCIPAL of the Govt college of Engineering , Kannur is suggested for MONITORING AND EVALUATION of the club activities .

b. Duties

The advisors shall serve as the official liaisons between the ROBOCEK and the administration and Associated Student Body. Inaddition, the advisors are expected to provide guidance to the officers and members of the club, make a reasonable effort to supervise regular group meetings when possible, and be liaison with the school with regard to the team money and finances. The advisors are responsible for determining the eligibility of potential members and mentors and supervising and certifying the results. Finally, the advisors are responsible for taking reasonable steps to address any problems or conflicts of a serious or emergency nature that may arise during club activities and are brought to the attention of the advisor.

c. Term Length

Under normal circumstances, advisors serve for the duration of the academic year and retain their position carrying forward into the following academic year.

d. Resignation

An advisor may choose to resign from his or her position at any time; however, he or she is highly encouraged to continue to serve, if at all possible, until a replacement is found.

e. Dismissal

In the unlikely event that an advisor demonstrates a long-term or severe failure to act according to club policies or perform the expected duties of his or her position, the elected student may, by majority vote, elect to recommend the removal of the advisor to the club. Student officers will need to communicate and work with THE PRINICPAL Govt college of engineering ,Kannur to facilitate the removal of an advisor .

f. Appointment

At any time during the academic year, the elected officers may recommend a candidate to become an additional advisor. An all club meeting must be held to vote on approval of the new advisor, where a majority vote of present members is needed with a majority of active club members and mentors present for the advisor to be confirmed.

VI. Office bearers

a. Positions

The main governing body of the ROBOCEK shall be its nine student office bearers. The officer positions are as follows:

President, Vice President, Secretary, Treasurer, Head of circuit design, Head of Mechanical design, , Head of

Project Management Head of Programming and Head of publicity and webmaster

b. Eligibility, Term Length

Officers must be eligible members of ROBOCEK at the time of their election and for the duration of the academic year in which they serve. No member may fill more than one of the ten above positions. Offices are held from the point of election until the point of the next election.

c. Duties

The officers are collectively responsible for the management of the Group. In addition, each officer has the following individual responsibilities:

The **President** is the chief student coordinator who oversees the operations of the club as a whole. Responsibilities include but are not limited to the following: working with the leadership group to plan and lead team meetings and events, setting team deadlines and ensuring that they are met, communicating with the advisors, other officers, and any appointed leads to coordinate and organize team project efforts, recruiting and communicating with mentors developing and maintaining relationships with outside groups.

The **Vice President** is the student who need to assist the president in all his activities and in the absence of president it's the duty of vice president to monitor club activities.

The **Secretary** is the student who is responsible for the proper keeping of all documents of the club. He is the one to conduct meetings of the club and to note the important decisions. He must also ensure that every decision taken are put into practice.

The **Treasurer** is the student responsible for the fund management of the club and to keep a full fledged account book for the club. He/she is responsible for every money in account of the club.

The **HEAD of Mechanical design** is responsible for overseeing the fabrication aspects of team projects and must work closely with the other officers and any appointed leads to coordinate construction efforts and systems integration while maintaining a clear vision of the overall project as a whole.

The **HEAD of circuit design** is responsible for overseeing the fabrication and designing of the circuits and to finish the appropriate task given to the group .they must rectify the problems regarding the assembly in the project .

The **HEAD of Programming** is accountable for all software on the robot. This includes, but is not limited to, robot code and any firmware in electronic components. They are also accountable for training the members of the programming subgroup, all software decisions for the robot and programming team, working with other officers to help ensure a functional robot, and any testing of the robot.

The **HEAD of Project Management** is responsible for planning, scheduling, and managing resources of team projects. He or she must frequently communicate with the other officers and any appointed leads throughout the build to make sure that the various components are built on time, also facilitating any design changes with the build VPs by analyzing costs, time restraints, and benefits.

The **HEAD of publicity and webmaster** is responsible for overseeing the publicity of group activities through social networking sites.He should also ensure whether the announcement About meetings of group are informed at right time. Maintain websites,creating project reports of multimedia contents are uder his supervision .

d. Resignation

An officer may choose to resign from his or her position by submitting a formal letter of resignation to the advisors. The position will remain vacant until a special or general election is scheduled and held.

e. Dismissal

In the event that an elected officer, lead, or captain demonstrates a long-term or severe failure to act according to club policies or perform the expected duties of his or her position, the remaining elected student officers and advisors may, by majority vote,

elect to remove him or her from office. If the officer is dismissed, the positionwill remain vacant until a special election is scheduled and held.

VII. Time management

For the proper working of club without affecting much in their academic sections, class hours are exempted. Holidays and the leisure time should utilized for the work.

In any special cases with the permission from advisor with a concerned letter can continue his work on class hours.

VIII. Subgroups

The officers and advisors shall establish various groups of students, known as "subgroups," to complete various aspects of team projects. The elected officers are responsible for assigning or electing members to subgroups; a member may participate in more than one subgroup at the discretion of the officers and advisors. Each subgroup shall contain at least one student leader. The officers and advisor(s) have to power to form or disband additional subgroups of temporary or permanent nature, provided that the above criteria are met in full.

IX. Mentorship

a. Purpose

Mentors empower students knowledge in science and technology by sharing their views and ideas. As such, the club have to actively recruit or keep in contact with industry mentors and other experienced adults to attend club meetings and provide advice throughout all stages of team projects.

b. Duties

Mentors must agree to be receptive and encouraging to students to help foster an environment that is conducive to student learning. While mentors are expected to participate in team activities and offer guidance and advice, the majority of hands-on work is to be completed by students. Mentors must also agree to provide basic contact information for registration and communication purposes.

c. Respect, Recognition Mentors will be treated with the utmost respect and gracious professionalism by all team members. If there is an occasion where a team member does not treat a mentor with respect and gracious professionalism, it should be reported to the club advisor and the club president. They have to take necessary actions. Mentors will be thoughtfully recognized by team members and elected leadership at the end of each academic year.

d. Resignation

A mentor may choose to discontinue his or her participation as a team mentor by communicating his or her resignation to the advisors. Upon doing so, the mentor shall be removed from the list of registered mentors

e. Dismissal

In the unlikely event that a mentor fails to meet the above duties and guidelines, grossly interferes with the team's intent to implement the projects, does not employ gracious professionalism with team members, the advisors, and other mentors, the advisor should be notified and the advisor will talk with the mentor about these issues and the incident.

X. Meetings

a. Purpose

ROBOCEK will, from time to time, hold both official and non-official meetings for the purposes of engaging in club activities and fulfilling its mission.

b. Official Meetings

Official meetings are held in public locations or locations approved by the club advisors. All official meetings must be supervised by at least one club advisor. Absence in official meeting isnot encouraged. The majority of work on team projects, as well all critical club functions (such as election, auditing reports), must be completed during official meetings.

c. Non-Official Meetings

Additional, non-official meetings may be held to complete work on team projects in smaller groups. It is the responsibility of the participants of the non-official meeting to provide a suitable location and ensure an appropriate level of supervision.

XI. Elections

A minimum of once each academic year, the ROBOCEK will hold elections to determine officers for the upcoming academic year and vote on other important club matters. Officers elected will begin their terms at the point of electionand hold them until the next election unless they resign or are dismissed. In any special case the governing body can be extended with the permission of group members and advisors.

XII. Team Spirit, Miscellaneous

The official mascot of is the Knight

The official team logo



The official club mail id :: riggcek@gmail.com

The official club facebook id :: www.facebook.com/riggcek

The official club website ::

XIII. Conflict of Interest

From time to time, situations may arise when an officer or advisor of the club may have an official, financial, personal, or otherwise conflicting interest with an official club matter of such nature that it may prevent acting rationally and impartially. In such a situation, they must found a solution in a descent manner which would not affect the management of the group.

XIV. Nondiscrimination Policy

The officers, mentors, advisors, members, and affiliates of the ROBOCEK may not discriminate on the basis of race, color, creed, disability, ethnicity, gender, nationality, sexual orientation, or economic status. When possible, the ROBOCEK should make arrangements to ensure that each student has an equal opportunity to gain a deeper understanding of the fields of science, technology, engineering, and mathematics.

XV. Dissolution

Upon dissolution of **ROBOCEK** if and when the organization becomes defunct, any assets of the organization may be distributed for the educational purposes to the GCE ,Kannur as determined by the officers and advisors . In this event, all titles and memberships in the ROBOCEK shall be immediately considered void.

XVI. Amendment

These bylaws may be amended whenever required, ordered from the principal GCE, KANNUR, requests from advisors ,2/3 of the active members proposed amendment is provided to the members at least one week in advance of the meeting where the vote is taken. Any member or advisor can propose such an amendment.

XVII. Public Availability of Bylaws

These bylaws of ROBOCEK, along with any ratified amendments, must be made publicly available to the member body.