ROBOMASTER 2023
UNIVERSITY CHAMPIONSHIP

PARTICIPANT MANUAL

Prepared by the RoboMaster Organizing Committee

Updated on February 2023
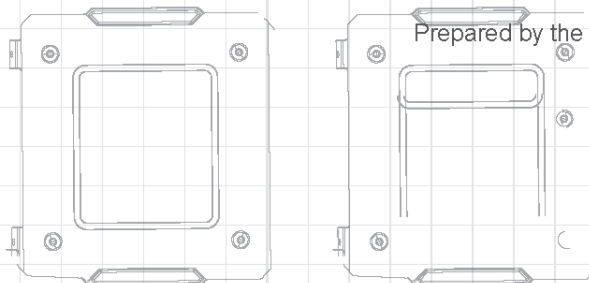
Statement

Participants are forbidden from engaging or participating in any actions determined by the RoboMaster Organizing Committee (hereinafter referred to as "the RMOC") as involving public disputes or sensitive issues or causing offence to the public or certain social groups, or damaging the image of RoboMaster; otherwise, RMOC shall have the right to disqualify offending persons permanently from the competition.

Using this Manual

Legend

⃠ Prohibition	⚠ Important notes	💡 Hints and tips	📖 Definitions and references

Change Log

Date	Version	Release Notes
February 10, 2023	V1.1	1. Revised the Season Schedule 2. Added the "Annual Technical Breakthrough Awards" 3. Revised the specifications on Technical Assessment
October 26, 2022	V1.0	First Release

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1. Introduction

Affiliated with the China University Robot Competition, the RoboMaster University Series is initiated by DJI, serving as an academic exchange platform specially designed for technology enthusiasts from all over the world. Since its establishment in 2013, the RoboMaster has been committed to their mission – "empowering young learners to transform their world with the power of engineering and technology". The RoboMaster is also dedicated to tapping the potential of young talents with engineering background while widely passing on the beauty of science & technology as well as innovation to the public.

The RoboMaster University Championship (RMUC) focuses on evaluating the participants' abilities to apply scientific and technical knowledge in an integrated and practical context. It combines robotics-related areas such as Machine Vision, Embedded System Design, Mechanical Control, Inertial Navigation and Human-Computer Interaction, while integrating e-sports and robotics competition in an innovative manner. The robotic battles are growing to become more intuitive and engaging, drawing attention from both technology enthusiasts and the public.

2. Participation

2.1 Participating Teams

The participating teams for RMUC 2023 are divided into three categories: Teams from Mainland China; Teams from Hong Kong, Macau, Taiwan and Overseas; and Chinese and Foreign Joint Teams.

The below shows the definition, participation rights and entry procedures for each type of team.

Table 2-1 Team Definitions, Participation Rights and Entry Procedures

Teams from Mainland China	
Definition	University or college participating teams that pass the registration review within the specified period, meet the relevant competition entry requirements and are from mainland China.
Participation Rights	Qualified for the 2023 Season competitions, awards application and promotion.
Participating Procedures	1. Teams are to follow the procedures applicable to mainland teams. 2. Participate in the Regional Competition (for the mainland China division), and those who perform well will advance to the Final Tournament.
Teams from Hong Kong, Macau, Taiwan and overseas	
Definition	University or college participating teams from Hong Kong, Macau, Taiwan and overseas that pass the registration review within the specified period and meet the relevant entry requirements.
Participation Rights	Qualified for the 2023 Season competitions, awards application and promotion. Note: Due to their different education systems, senior high school students from Hong Kong, Macau, Taiwan and overseas are allowed to participate, but their number must not exceed 20% of the total number of team members.
Participating Procedures	1. Teams are to follow the procedures applicable to Teams from Hong Kong, Macau, Taiwan and Overseas. 2. Participate in the Regional Competition (for the international division), and those who perform well will advance to the Final Tournament.
Chinese and Foreign Joint Teams	
Definition	Teams formed between a university or college from mainland China and a university or college from Hong Kong, Macau, Taiwan or overseas that pass the registration review within the specified period and meet the relevant entry requirements.

Participation Rights	Qualified for the 2023 Season competitions, awards application and promotion.
Participating Procedures	1. Teams from mainland China are to follow the procedures applicable to mainland teams. 2. If the mainland school forms a team with teams whose universities are located in China Hong Kong, Macau, Taiwan or overseas, the team is subject to the entry procedures in accordance with the standards for teams from Hong Kong, Macau, Taiwan and overseas.

📖 Teams participating in the Regional Competition (Mainland China) according to the entry procedures for Teams from Mainland China are divided into Tier-1 Teams and Tier-2 Teams. For further details, please refer to "Scoring and Ranking System".

Teams must adhere to the following rules:

R1 All teams are required to form their teams at the RoboMaster Registration Center, fill in their team details, and invite members to join. Before the registration is confirmed by the Captain, the details may be amended. Once it is confirmed, the details will be locked in and submitted to the RMOC for review. The registration will be approved if the details meet the various rules in this chapter. The RMOC will open the Registration Center from time to time in the competition season, during which teams can modify their team and member details, their roles and granted permission, etc. The Registration Center will be open for one last time before the competition starts. The RMOC will follow the final information submitted in preparing and giving out award certificates.

R2 Any team participating in different competitions must use the same team name. A team's name must be in the format of "XXX Team", where "XXX" shall be the team's self-chosen name. The total length of the team name should not exceed 16 English letters or 8 Chinese characters. The team name must not include the school name or its abbreviation in Chinese/English, or such Chinese characters as "队", "团队", and "战队" which mean "team" in English, or other special symbols such as "*/-+". The team name must reflect the positive and pioneering spirit of the team and comply with relevant laws and regulations in China. The team name must reflect the positive and pioneering spirit of the team and comply with relevant state laws and regulations. If the RMOC determines that a team's name does not align with the spirit of the competition, it has the right to require the team to change its name.

🔅 After submitting their registration materials, teams are not allowed to change their team names except where required by sponsors for endorsement purposes.

R3 Each team must be representing a university/college and meet the requirements for the team roles, number and identity of participants stated in "2.1-Participating Teams". If any participant's identity does not meet the

requirements, the referee will issue a Verbal Warning to the participating team. If the Verbal Warning is ineffective, the highest penalty that can be given to the offending party is disqualification depending on the seriousness of the situation.

R4 In principle, each college or university is only allowed to have one qualified team for one competition (challenge). Institutions having multiple campuses in different cities, making it difficult for certain students to compete as a team, are allowed to form more than one campus-based teams provided it has been verified by the RMOC. If a school has more than one team applying for the competition, refer to the Announcement on the List of Representative Teams for RoboMaster University Series 2023. The applicant must ensure that its registration information is complete and accurate, and that it will undertake the corresponding responsibilities. The applicant must bear all consequences caused by any missing or inaccurate information. For special circumstances, the applicant may contact the RMOC, which will handle the case based on actual circumstances. The RMOC reserves the right of final interpretation.

> The RMOC will reject the registration of any team that does not meet any of R1-R4. The participating team can reapply until it meets the requirements.

R5 Any two to five schools that do not have their own individual teams can form an intercollegiate team.

A. Before establishing an intercollegiate team, members must consider all their respective circumstances and communicate with each other thoroughly about team planning. Any operating and R&D costs, personnel arrangements or disputes arising therefrom must be handled by the intercollegiate team itself, for which the RMOC bears no responsibility.

B. Intercollegiate teams are not allowed to be split after they're officially established. They can only participate in the University Championship as intercollegiate teams. If an intercollegiate team is disbanded after passing the registration review, the team will be deemed to have voluntarily dropped out of the competition.

C. The intercollegiate team's name should be "XXX Intercollegiate Team" instead of "XXX Team." An intercollegiate team is required to upload an Intercollegiate Team Statement issued by its college or university to the registration system. Refer to the registration system for the template of the Intercollegiate Team Statement.

D. If more than 50% of the members in an intercollegiate team are regular members in team(s) from Hong Kong, Macau, Taiwan and overseas, this intercollegiate team shall be categorized as a team from Hong Kong, Macau, Taiwan and overseas. Otherwise, the intercollegiate team shall be categorized as a team from Mainland China. For the corresponding rights and processes in all team categories. please refer to "2.1-Participating Teams".

R6 In this season, one participant can only join one team for the competition. If a team member fails to observe the above requirement, the referee will issue a Verbal Warning and require the member to withdraw from one

of the teams. If the Verbal Warning is ineffective, the highest penalty that can be imposed on the offending member and team is disqualification from the competition.

R7   If any two or more teams do not meet any one requirement under the "Five Differences" Rule, they shall be treated as the same team.

> The "Five Differences" Rule: Different team names, different team members, different supervisors, different affiliated institutions (college or other educational institutions), and different robots.

R8   Provided the relevant registration requirements are met, one team can sign up for more than one RoboMaster competition (including RMUC and RMUL).

R9   The RMOC will deem a team participating in different competitions in the same season as one and the same group, to handle the various competition processes more efficiently (including free material supply, material purchases, and participation support). A team cannot be broken up after completing registration for the season.

2.2   Participants

The RoboMaster advocates teamwork and co-operation. To encourage the team members to take the initiatives and undertake important roles within the team, the RoboMaster Organizing Committee (hereinafter referred to as "RMOC") will also award participants who have made great contributions to the competition. Prizes includes: Outstanding Captain Award, Outstanding Supervisor Award, etc. For more details, please refer to "4.4 -Outstanding Contribution Awards".

The roles and responsibilities of participants are as follows:

Table 2-2 Participant Roles and Responsibilities

Roles	Role Instructions	Responsibilities	Status	No. of Persons
Supervisor	● Person in charge of the team ● Cannot simultaneously assume the roles of advisor and Regular Member	● Responsible for building and managing the team ● Guide the team in building their robots ● Responsible for the personal safety of the team and the security of its property	Faculty members of the team's college or university who are qualified to teach or conduct scientific research and will have graduated by August 2023 (Evidence may be required to be shown on site)	1-5

Roles	Role Instructions	Responsibilities	Status	No. of Persons
		• Coordinating on-campus resources, guide the team in developing project plans, controlling preparation progress, help the team successfully conclude the match • To cooperate with the RMOC proactively during the competition		
Advisor	• Team Advisor • Cannot simultaneously assume the roles of Supervisor and Regular Member	• Provide guidance and support to the team on strategy, technology, management, etc. • An Advisor can undertake robot-building tasks and handle other competition-related matters.	Full-time junior college students, undergraduates, postgraduates, and doctoral degree candidates in colleges and universities, as well as engineers, researchers and faculty members working in enterprises, research institutions, or as freelancers	0-5
Regular Members	• Regular Members include the Captain, Vice Captain, PR Manager, Project Manager, Business Manager and General Members. • They are not allowed to assume both the roles of Advisor and Supervisor.	Please refer to the table below.	Junior college students, undergraduate students, postgraduate students, and doctor students in full-time colleges and universities with proof of their identity between September 2022 and August 2023 (Evidence may be required to be shown on site).	10-35

Roles	Role Instructions	Responsibilities	Status	No. of Persons
Reserve Member	The Reserve Members of the team will be temporarily engaged in personal study and growth, and may become Regular Members after being observed and promoted by the team. Note: Reserve Members are not qualified for the award. They will only receive certificates of participation issued by the RMOC.	Assisting the Regular Members in the competition		0-20

Table 2-3 Regular Members' Roles and Responsibilities

Roles	Role Instructions	Responsibilities	Quantity
Captain	● Core team member ● Technical and tactical leader ● Person in charge of building team culture ● The main liaison with the RMOC	● Responsible for the division of labor, overall planning and tactical arrangement and adjustment ● Attend Captains Meetings, represent the team in confirming match results, and participate in appeal processes during the competition ● Responsible for building team culture and fostering positive values among team members ● Responsible for the legacy and development of the team Note: Before the Regional Competition, the Captain of the team must be confirmed. They shall be involved in the core competition processes.	1
Vice Captain	Core team member	● Along with the team leader, forms the core management team ● Assists the Captain with the management of the team	0-3

Roles	Role Instructions	Responsibilities	Quantity
Project Manager	● Core team member ● Overall manager of the project	● In charge of managing project tasks and coordinating funds, materials, personnel and other resources ● Establish sound rules and systems for managing the team ● Plan and manage the the team's targets, progress, and costs	1
PR Manager	● Person in charge of promoting the team ● Implementer of the team's culture	● Responsible for pooling promotion resources and establishing a comprehensive system ➢ Organize activities via university platforms, and promote the team and the competition at university ➢ Organize daily promotional activities for the team via new media channels, keep the team active, and improve the team members' alertness to the competition ● Plan and execute publicity plans for and develop the team's culture, to attract and retain more like-minded and talented members in the team ● Cooperate with the RMOC proactively in publicity and manage the content generated and fans gained by the team	1
Business Manager	● Manages business canvassing ● Can be undertaken by people assumed other roles.	● Responsible for pooling the team's internal and external resources ● Prepare investment plans, seek partners through various channels, provide technical support to the team, and seek sponsorships	0-1
General Member	Assumes none of the above roles	-	3-32

💡 Apart from the above officially required roles, teams can set up other roles as they deem fit, such as technical team leads or robotic team leads.

2.3 Rule Inquiries

The RMOC can be reached via the following contact channels. The office hours are: 10:30-12:30, 14:00-19:30 on weekdays. For further contact information and Q&A rules of the RMOC, please refer to RoboMaster Organizing Committee Official Contact Details and FAQ Rules.

Table 2-4 Contact Channels

Channel	Contact information
Forum	bbs.robomaster.com
E-mail	robomaster@dji.com
Phone	0755-36383255
WeChat	rmsaiwu Note: When sending a friend request, please indicate "competition + institution name + designation + name"

3. Season Schedule

The following season schedule is for reference only. The specific time is subject to the latest announcement by the RMOC.

The RMUC 2023 consists of two schedules: the Online Schedule and the Offline Schedule. The RMOC recommends that each team formulate a preparation plan and a robot production budget and plan before the competition, to estimate the manpower and funds needed and avoid wasting such resources.

A team has to complete the Registration and complete and pass the relevant mandatory sections before the deadline to qualify for the competition. Teams passing specific sections of the Technical Assessment will earn a corresponding Product Education Discount (hereinafter referred to as "product discounts") provided by the RMOC.

● For more details on the Technical Assessment specifications, please refer to "Appendix 1-Technical Assessment".

● For the product discounts applicable to each Technical Assessment section, please refer to the "RoboMaster 2023 Instructions for Purchasing Materials".

The mandatory sections for the different teams are as follows:

Table 3-1 Mandatory Sections for Different Teams

Team Categories	Mandatory Sections	Descriptions
Tier-1 Teams	Sections with *	● A Tier-1 Team must complete sections with * to qualify for the RMUC 2023 Regional Competition, otherwise its will be deemed ineligible for the Regional Competition in the current season, and its place will be taken by another Tier-2 Team that has passed the Technical Assessment. ● For Tier-1 Teams, non-completion of sections without * will not disqualify them from the Regional Competition, but they will lose the benefits from those sections (Product Discounts, Open-Source Bonuses, etc).
Tier-2 Teams, and Teams from Hong Kong, Macau, Taiwan and Overseas	All sections	Tier-2 Teams and teams from Hong Kong, Macau, Taiwan and overseas must complete all sections to qualify for the RMUC 2023 Regional Competition.

Table 3-2 Online Schedule

Schedule	Section	Applicable Teams	Descriptions
October 26, 2022, 18:00 - November 16, 2022, 18:00		Teams from Mainland China	

October 26, 2022, 18:00 - November 23, 2022, 18:00	* Registration on RoboMaster Official Website	Teams from Hong Kong, Macau, Taiwan and overseas	Log in the RoboMaster website and complete the registration as required.
November 25, 2022, 18:00 - November 26, 2022, 18:00	Technical Assessment - Rules Exam	Teams from Mainland China	• Receive the product discounts corresponding to the section. • The team will receive permission to submit a Season Schedule.
December 5, 2022, 18:00 - December 6, 2022, 18:00		Teams from Hong Kong, Macau, Taiwan and overseas	
December 12, 2022, 18:00 - December 14, 2022, 18:00	*Technical Assessment – Competition Planning	Teams from Mainland China	• Receive the product discounts corresponding to the section. • Obtains permission to participate in the Referee System Exam
December 19, 2022, 18:00 - December 21, 2022, 18:00		Teams from Hong Kong, Macau, Taiwan and overseas	
January 13, 2023, 18:00 - January 14, 2023, 18:00	*Technical Assessment – Referee System Exam	Teams from mainland China; teams from Hong Kong, Macau, Taiwan and overseas	Obtains permission to participate in the Mid-Term Progress Assessment
March 6, 2023, 18:00 - March 8, 2023, 18:00	Technical Assessment – Mid-Term Progress Assessment	Teams from mainland China; teams from Hong Kong, Macau, Taiwan and overseas	• Qualify for borrowing a set of the Standard, Hero/Standard, and Sentry Referee Systems • Obtains permission to participate in the Final Robot Assessment Note: Teams participating in the RMUL 2023 3V3 Confrontation and that have passed this section are not allowed to claim Referee Systems more than once.
April 10, 2023, 18:00 - April 12, 2023, 18:00		Teams from Mainland China	• Obtains permission to borrow the full Referee System

June 5, 2023, 18:00 - June 7, 2023, 18:00	*Technical Assessment - Final Robot Assessment	Teams from Hong Kong, Macau, Taiwan and overseas	• Obtains permission to submit competition feedback Note: The score received for the Project Documents and Technical Proposal will affect the team's initial gold coin quantity for each round during the Regional Competition.
April 21, 2023, 18:00 - April 23, 2023, 18:00	* Competition Feedback	Teams from Mainland China	Teams may choose their divisions or accept the arrangements of the RMOC. The RMOC will decide which teams have priority in their choice of competition venue and are qualified for the on-site competition, based on the region in which their college or university is located and their rankings.
June 17, 2023, 18:00 - June 19, 2023, 18:00		Teams from Hong Kong, Macau, Taiwan and overseas	
June 2023	*Technical Assessment – Regional Competition Seasonal Summary	Teams from Mainland China that have failed to advance from the Regional Competition	Qualified for the Regional Competition certificates and prizes
August 2023	*Technical Assessment – Final Tournament Seasonal Summary	Teams from Mainland China, and from Hong Kong, Macau, Taiwan and Overseas advancing from the Regional Competition	Receives the Final Tournament certificate and qualifies for prizes

Table 3-3 On-site Schedule

Schedule	Competition	Applicable Teams	Eligibility
May - June 2023	Regional Competition (Mainland China division)	Teams from Mainland China	• Tier-1 Teams will become qualified to participate in the Regional Competition once they pass the mandatory parts of the Technical Assessment prior to the competitions • Tier-2 Teams will qualify for the Regional Competition once they have passed all sections of the Technical Assessment prior to the competition.
July 2023	Regional Competition (International division)	Teams from Hong Kong, Macau, Taiwan and overseas	Teams from Hong Kong, Macau, Taiwan and Overseas who have successfully completed all Technical Assessment sections before the Regional Competition are qualified. Note: The RMOC may adjust arrangements for on-site competitions based on the global pandemic situation.
July - August 2023	Wild Card Competition	Teams from Mainland China	Teams from Mainland China advancing from the Regional Competition (mainland region) are qualified.
July - August 2023	Final Tournament	Teams from mainland China; teams from Hong Kong, Macau, Taiwan and overseas	Teams which have successfully completed the Regional Competition and Revival Stage are qualified.

4. Awards

This section sets out the awards structure for the RMUL 2023.

- The names of the awards are subject to further adjustments and the actual certificates issued shall prevail.

- The number of awards for the Regional Competitions and Final Tournament applies to the Mainland China division, while the awards for the International division will be adjusted according to the number of its participants.

- The judging criteria for the Open Source Awards, Outstanding Contribution Awards, Organization Awards, Robot Combat Awards, Best Design Creativity Awards, and Annual Technical Breakthrough Awards can be found in "Appendix 2 Award Selection ".

4.1 Regional Competition

The awards for the Regional Competition are as follows:

Table 4-1 Regional Competition Awards Setup

Prize	Ranking	Quantity	Awards
Regional Competition First Prize	Regional Champion: First place in the region	1 per region	- Champion trophy - Regional first prize certificate - Cash prize of RMB 30,000 (pre-tax)
	Regional Runner-up: Secon place in the region	1 per region	- First runner-up trophy - Regional first prize certificate - Cash prize of RMB 30,000 (pre-tax)
	Regional Second Runner-up: Third place in the region	1 per region	- Second runner-up trophy - Regional first prize certificate - Cash prize of RMB 30,000 (pre-tax)
	Regional Third Runner-up: Fourth place in the region	1 per region	- Regional first prize certificate - Cash prize of RMB 30,000 (pre-tax)
	5th – 8th in the region	4 per region	- Regional first prize certificate - Cash prize of RMB 15,000 (pre-tax)
	9th – 16th in the region	8 per region	- Regional first prize certificate - Cash prize of RMB 8,000 (pre-tax)

Prize	Ranking	Quantity	Awards
Regional Competition Second Prize	17th – 32rd in the region	16 per region	Regional second prize certificate

4.2 Final Tournament

The awards for the Final Tournament are as follows:

Table 4-2 Final Tournament Awards

Prize	Ranking	Quantity	Awards
Final Tournament First Prize	Champion: First place	1	• Champion trophy • Champion medal • First prize certificate • Cash prize of RMB 150,000 (pre-tax)
	First Runner-up: Second place	1	• First runner-up trophy • First Runner-up medal • First prize certificate • Cash prize of RMB 150,000 (pre-tax)
	Second Runner-up: Third place	1	• Second runner-up trophy • Second Runner-up medal • First prize certificate • Cash prize of RMB 150,000 (pre-tax)
	Third Runner-up: Fourth place	1	• First prize certificate • Cash prize of RMB 150,000 (pre-tax)
	5th to 16th place	12	• First prize certificate • Cash prize of RMB 30,000 (pre-tax)
	17th to 32nd place	16.	• Second prize certificate • Cash prize of RMB 10,000 (pre-tax)

Prize	Ranking	Quantity	Awards
Final Tournament Second Prize	Teams that have advanced from the Regional Competition to the Wild Card Competition and have not advanced to the Final Tournament	Multiple	Second prize certificate
Final Tournament Third Prize	Teams from Mainland China that have won the First Prize in the Regional Competition but could not advance to the Final Tournament	Multiple	Third prize certificate
	17th to 32nd place in each region	48	Third prize certificate

4.3 Open Source Awards

Teams applying for the Open Source Awards are required to have made their core technologies or operation management approaches open-source during the RM2023 season (Oct 26, 2022 to Aug 24, 2023) on bbs.robomaster and robomaster.com, for the purposes of promoting technical development at the RoboMaster University Championship and the innovative culture and spirit of engineers.

- There is no fixed number of Open Source Awards, and the RMOC will rank them according to the coverage and quality of the submitted open-source solutions (including but not limited to aspects such as software, hardware, and mechanical). If there are no open-source projects of an outstanding nature, no winner will be announced for the Open Source Grand Prize. But if there is more than one outstanding open-source project, the Grand Prize may be awarded to multiple winners.
- The top four teams in the Final Tournament must share their robot type information and seasonal summaries required by the RMOC as open-source content in accordance with the relevant rules and specifications. Otherwise, the release of the cash prizes may be affected. The RMOC will add more Open Source Awards depending on the actual open source situation.

Open Source Award is as follows:

Table 4-3 Open Source Awards

Prize	Quantity	Awards
Open Source Grand Prize	Multiple	● Award certificate (team) ● RMB 100,000 (pre-tax)
Open Source First Prize	Multiple	● Award certificate (team) ● RMB 50,000 (pre-tax)
Open Source Second Prize	Multiple	● Award certificate (team)

Prize	Quantity	Awards
		● Cash prize of RMB 15,000 - 30,000 (pre-tax), awarded based on an overall assessment of the open-source materials
Open Source Third Prize	Multiple	● Award certificate (team) ● RMB 10,000 (pre-tax)
Open Source Outstanding Prize	Multiple	● Award certificate (team) ● Cash prize of RMB 2,000 - 5,000 (pre-tax), awarded based on an overall assessment of the open-source materials

4.4　Outstanding Contribution Awards

Outstanding Supervisor award recipients, Outstanding Captain award recipients, and Outstanding Project Manager award recipients are required to submit a personal work summary and experience description within one month after the selection result is announced and are obligated to participate in the sharing sessions and surveys conducted by the RMOC.

Outstanding Contribution Award is as follows:

Table 4-4 Outstanding Contribution Awards Setup

Prize	Quantity	Awards
Outstanding Supervisor	No more than 8 people in total for this season	● Award certificate (individual) ● Cash prize of RMB 8,000 (pre-tax)
Outstanding Captain (Team)	No more than 8 groups in total for this season	● Award certificate (individual) ● Cash prize of RMB 5,000 (pre-tax)
Outstanding Project Manager	No more than 8 people in total for this season	● Award certificate (individual) ● Cash prize of RMB 5,000 (pre-tax)
Outstanding PR Team	No more than 8 groups in total for this season	● Award certificate (team) ● Cash prize of RMB 3,000 (pre-tax)
Outstanding Business Team	No more than 8 groups in total for this season	● Award certificate (team) ● Cash prize of RMB 3,000 (pre-tax)
Outstanding Advisor	No more than 8 people in total for this season	● Award certificate (individual) ● Cash prize of RMB 3,000 (pre-tax)

Prize	Quantity	Awards
Outstanding Volunteer	● No more than 10 people per region ● No more than 15 people for the Final Tournament	Award certificate (individual)

4.5   Organization Awards

The setup of the Organization Awards is as follows.

Table 4-5 Organization Awards

Prize	Quantity	Awards
Rookie Award	No more than 5 teams	● Award certificate (team) ● Cash prize of RMB 5,000 (pre-tax)
Mainstay Award	No more than 5 teams	● Award certificate (team) ● Cash prize of RMB 5,000 (pre-tax)
Competitive Spirit Award	No more than 5 teams	● Award certificate (team) ● Cash prize of RMB 5,000 (pre-tax)
Cost Control Award	No more than 5 teams	● Award certificate (team) ● One GM6020 brushless DC motor worth RMB 899
Top Tactician Award	No more than 5 teams	● Award certificate (team) ● Cash prize of RMB 5,000 (pre-tax)
Discipline Building Award	No more than 5 teams	● Award certificate (team) ● Cash prize of RMB 5,000 (pre-tax)

Recruitment Participation Award	Multiple	● Award certificate (individual)
		● Materials corresponding to the cash prize
		  ➢ Ten persons or more: Cash prize of RMB 2,000, with an extra RMB 1,000 (of materials) for every additional five persons
		  ➢ Twenty persons or more: Cash prize of RMB 6,000, with an extra RMB 1,000 (of materials) for every additional five persons

Prize	Quantity	Awards
Best Talent Scout Award	Multiple	• Award certificate (individual) • The cash prize shall be given based on the number of persons effectively recruited. ➢ Cash prize: RMB 1,000/person (pre-tax) Note: Only applicable to teams from Mainland China, and from Hong Kong, Macau, Taiwan
Best Season Schedule Award	No more than 10 people	• Award certificate (team) • The top two teams will receive a set of Standard Referee System (excluding the VTM module) worth RMB 5,033; teams ranked 3rd to 10th will receive one GM6020 brushless DC motor and one battery rack.
Best Technical Report	No more than 5 teams	• Award certificate (team) • Cash prize of RMB 3,000 (pre-tax)

4.6 Robot Combat Awards

The number of awards will be calculated according to the ratios listed below, based on the award criteria and the number of the teams participating in the Regional Competition. If the result is a decimal number, it should be rounded up to an integer.

The setup of the Robot Combat Awards is as follows:

Table 4-6 Robot Combat Awards

Awards	Descriptions
Robot Type	Standards, Engineers, Heroes, Aerials, Sentries, and Dart System
Quantity	● **First Prize:** approximately 15% ● **Second Prize:** approxately 25% ● **Third Prize:** multiple Note: The number of different awards given for each robot type shall be adjusted based on the actual number of teams eligible for the awards and the performance of each robot in the competition.
Awards	Award certificate (team)

4.7 Best Design Creativity Awards

Recipients of the Best Design Creativity Awards are required to share their design insights, and the submitted materials will be revealed in the judge's remarks.

The setup of the Best Design Creativity Awards is as follows:

Table 4-7 Best Design Creativity Awards

Prize	Quantity	Awards
Best Design Creativity Awards	No more than 10	● Award certificate (team) ● RMB 1,500 (pre-tax)

4.8 Annual Technical Breakthrough Awards

The winners of the Annual Technical Breakthrough Awards must share their relevant robot types and seasonal summary as open-source content in accordance with the rules and specifications. Otherwise, the release of the cash prizes may be affected. The RMOC will add more Open Source Awards depending on the actual open source situation (with the prize money to be based on the highest award).

Table 4-8 Annual Technical Breakthrough Awards

Prize	Quantity	Awards
First Prize	No more than 1 for each robot type	● Award certificate (team) ● RMB 15,000 (pre-tax)
Second Prize	No more than 2 for each robot type	● Award certificate (team) ● RMB 10,000 (pre-tax)
Third Prize	No more than 3 for each robot type	● Award certificate (team) ● RMB 5,000 (pre-tax)

Appendix 1 Technical Assessment

The purpose of the Technical Assessment is for the teams to demonstrate their technical skills and guiding them in their plans and preparations as well as development based on previous experience. It also offers an opportunity for team members to polish their skills including requirements analysis, budgeting, data analysis and report drafting. All teams must complete a Technical Assessment in accordance with the requirements of the RMOC and within the time specified.

The Technical Assessment of RMUC 2023 mainly consists of six sections: Rules Exam, Competition Planning, Mid-Term Progress Assessment, Referee System Exam, Final Robot Assessment, and Team Season Summary. The latest tasks and requirements relating to each section of the Technical Assessment shall be based on announcements on the official website. For the schedules of each section, please refer to "3 Schedules".

In addition, the Aerial Robot operators must pass the Pilot Assessment (including theory and video assessments) to be able to fly their robots and receive Projectile Allowance. If the pilot fails any of the assessments, no Aerial Robot in the team can be flown and launch projectiles, but the team and this pilot will remain qualified. The tasks and requirements for the Pilot Assessments will later be published on robomaster.com.

ONES focus on developing enterprise-level R&D management tools and solutions. As a partner of RoboMaster, ONES provides all participating teams with product management matrixes for free in enterprise editions, including Project (for R&D project management and task coordination), Plan (for program, project portfolio management), Wiki (for document coordination and knowledge base management), TestCase (for use case testing and test plan management), and Pipeline (for pipeline management). These professional tools will offer support throughout the entire R&D life cycle, promoting ideal coordination in R&D, enhancing efficiency and ensuring the quality of the deliverables. The RMOC recommends that teams use ONES products during competition preparation to facilitate the Technical Assessment. To apply for the free RoboMaster Exclusive Space, please contact us via our event dedicated WeChat account at: rmsaiwu.

Below are the specifications for video and other files to be submitted for the Technical Assessment:

Appendix Table 1 Submission Specifications

Document Type	Specification
Text	● Format: PDF ● Font: SimSun (Chinese) or Times New Roman (English), 12 pt ● Line spacing: 1.5 ● File naming format: Institution name + team name + file name
Table/Form	● Format: Excel

Document Type	Specification
	● Font: SimSun (Chinese) or Times New Roman (English), 11 pt ● Table format: Wrap Text, AutoFit Row Height and Column Width ● Alignment: Vertical center, horizontal left or center, unless otherwise specially requested.

Slides	● Format: PPT
	
	● Font: SimSun (Chinese) or Times New Roman (English), 24 pt
	
	● Content:
	
	  ■ Each slide must have a title to summarize the content
	
	  ■ Display all content in Normal View and avoid using animations that requires to play the slides
	
	● File size: Max 300M

Video	● Resolution: 720p
	
	● Upload method: Upload the video to Youku and submit the video link. A viewing password may be set.
	
	● Content:
	
	  ➢ Subtitles or commentaries should be included to explain each process in the video
	
	  ➢ Only relevant content should be shown, with the video well-paced and its duration kept within the maximum length.

A. Rules Exam

The scope of the Rules Exam includes: "RMUC 2023 Rules Manual", "RMUC 2023 Participant Manual" and "RMUC 2023 Robot Building Specifications" and relevant competition terms and requirements.

B. Season Schedule

Chance for submission: Once

Passing Criteria: Scored 45% or more

Content to be submitted and requirements:

● Planning Document: PDF format, without word limit

● Schedule: Excel format

● Team Budget: Excel format

Appendix Table 2 Season Schedule Assessment Requirements

Content	Section	Content	Score
Planning Document	**Team Goals**	Organize team discussions, and set and explain the team's goals for each area in this season based on the team's current situation, including but not limited to technical breakthroughs, team members' development, planning and operation, competition results, etc.	5
	Team Culture	Organize team discussions and record the conclusions. 1. Team's perception and interpretation of the competition's content and culture; 2. Present concrete proposals for building the team's culture (goals, timeline, plan execution, etc.)	10
	Project Analysis	1. Study and interpret the rules of the new season, analyze the requirements for the designing of each robot, and write down the ideas. 2. Based on the robot categories and technical directions, share open-source resources, user manuals of the materials, as well as other resources and literature (including but not limited to online video, industrial standards, etc.). 3. Explain the new technical points the team is planning to develop in this new season based on the above requirements analysis, as well as existing technical points that need to be optimized or enhanced; specify the goals for each of the above points, i.e. the results the team aims to achieve with the new technical points and the projected performance indicators after the existing technical points are optimized. Open-source materials or literature referenced during the research may also be included as notes.	25
	Team Structure	1. Organize the overall structure of the team and clarify the hierarchical relationships and connections between all positions and groups.	5

Content	Section	Content	Score
		2. Specify the responsibilities and functions for each position. 3. Specify the profiles and number of candidates to be recruited for the vacancies. 4. Specify the overall plan for team-culture building and legacy development (including the training of new members, and organizing of legacy technical files/drawings/codes).	
	Infrastructure	1. Keep a record of the available resources (funds, materials and manufacturing resources). 2. Present a practical and effective plan for using codes, drawings as well as document coordination tools. 3. Present a plan for using R&D management tools (ONES AI, etc.), 4. Demonstrate training arrangement and self-learning progress.	10
	Business and Promotional Plan	Sponsorship and publicity planning	10
	Team Rules and Regulations	Draft complete and executable rules and regulations at the team level. 1. Clarify the various aspects of the internal system (such as: recruitment, training, meeting, attendance, assessment, expenditure, and auditing decisions). 2. Detail the team's internal review and decision-making mechanism, and specifying the work flows for proposing and assigning tasks, and for verifying, reviewing, tracking, and inspecting their performance and results.	10
	Schedule	1. Clear plan and specific timeline for robot building progress and acceptance check, based on robot types and technical areas.	15

Content	Section	Content	Score
		2. The schedule for the completion of other tasks (such as site set-up, tool commissioning, etc.) 3. Manpower distribution plan (the number of people and time to be allocated for each module).	
	Team Budget	Prepare a budget plan according to funds that can be acquired as well as the expenses involved in the competition (the cost report from the previous season may be referred to). Note: The categorization should be exhaustive and clear; the budget of robot development and lab management should be reasonable.	10

C.Mid-Term Progress Assessment

Chance for submission: Once

Passing Criteria: All teams will be ranked according to their final score. A certain proportion of the top-ranked teams will pass this section.

Content to be submitted and requirements:

● Mid-term Presentation: Video and PowerPoint file.

● Progress Plan (Updates): Excel format

● Culture-building Progress Report: PDF document

Appendix Table 3 Mid-term Progress Assessment Requirements

Content	Section	Content might be included	Score
	Mid-term Presentation	to show the plan and progress of each robot category with proof and evidence including video clips, screenshots of the progress plan, screenshots of the drawings, debugging records, etc. For details, please refer to "RoboMaster University Series 2023 Technical Assessment Progress Appraisal Rules". The rules above only provide a reference as to the scores a team may earn for completing a specific function. Additional scores may be given for the completion of functions not covered in the rules. Teams are advised to display the progress that they have achieved as much as possible.	-

Content Section	Content might be included	Score
Progress Plan (Updates)	1. Update the progress of the robot-building plan, review progress gaps, analyze the reasons, and adjust the subsequent plan accordingly. 2. Provide a schedule for the completion of other tasks (such as site set-up, tool debugging, etc.) 3. Provide a manpower distribution plan (the number of people and time to be allocated for each module).	80
Culture-building Progress Report	1. Detail how the team has built its culture in his season. 2. Analyze the team's understanding of the competition's culture, and explain how the team's subsequent areas of focus in building its culture.	20

D. Referee System Exam

The scope of the Referee System Exam includes: "RoboMaster Referee System User Manual" and documents related to the Referee System.

E. Final Robot Assessment

Chance for submission: 1

Passing Criteria: The teams will be ranked according to their Final Robot Assessment scores. A certain proportion of the top-ranked teams will advance from this round.

Content to be submitted and requirements:

- Final Robot Presentation: Video and PowerPoint file.

- Technical Proposal: PDF document

- Project Documents:

  - Cost Report: PDF document

  - Expenditure Record: Excel format

  - BOM Record of the Corresponding Robot: Excel format

Appendix Table 4 Final Robot Assessment Requirements

Content	Section	Content might be included	Score
Final Robot Presentation		to show the plan and progress of each robot category with proof and evidence including video clips, screenshots of the progress plan, screenshots of the drawings, debugging records, etc. For details, please refer to "RoboMaster University Series 2023 Technical Assessment Progress Appraisal Rules". The rules above only provide a reference as to the scores a team may earn for completing a specific function. Additional scores may be given for the completion of functions not covered in the rules. Teams are advised to display the progress that they have achieved as much as possible.	-
Technical Proposal		Detailed descriptions of the robots' design concepts, technical plans, brief outline of tactical positioning, etc. The specific details and templates to be updated later.	100
Project Documents	**Cost Report**	1. Introduce in detail the budget status, budget amount, budget already spent, and the subsequent budget plans for the current season. 2. Analyze in depth the reasons of irregular budget status (overrun/surplus) based on the references including the Expenditure Statement and "Team Budget" in the Competition Planning section. Put forward solutions based on the analysis.	40
	Expenditure Statement	Make a record of the team's expenditures, including detailed information such as the types and amount of the expenses. Note: The record should be thorough and clear, in which the costs are traceable, and should be analyzed.	30
	BOM Record of the Corresponding Robot	Record the robot parts that are currently available in full and in detail. Divide them into modules for a clearer view.	30

F. Team Season Summary

Chance for submission: Once

Passing Criteria: Scored 45% or more

Content to be submitted and requirements:

● Technical Report: PDF document

● Summary Document: PDF document

Appendix Table 5 Season Summary Assessment Requirement

Content	Area	Content	Score
Technical Report		To update and optimize based on some details in the technical solution in the Final Robot Assessment. The specific details and templates to be updated later.	50
Summary Document	**Team-building Analysis**	Perform a post-mortem after the competition, and review the competition outcome against the team's goals in terms of technical breakthroughs, planning and execution, match results, and other areas, analyze any actual discrepancy and its reasons, and conclude useful experiences from the building and management of the team.	5
	Culture-building Analysis	Review the culture-building plan and goals for the whole season, analyze any actual discrepancy and its reasons, and provide useful suggestions for culture building.	10
	Project Analysis	Review the team's understanding of the rules and functional requirements for each robot type in its season plan, analyze any discrepancy and the reasons therefor, and conclude useful experiences from the team's interpretation of the rules and analysis of robot requirements.	30
	Team Structure Overview	Provide the team's framework and member structure, compare the team's composition at the start and during the competition, analyze the reasons for members' departure, and conclude useful experiences from the building of the team as well as training and retention of new members.	10

Content	Area	Content	Score
	Post-mortem of Basic Tools and Resources	1. Review the resources and tools actually used against the available resources and tools, analyze any actual discrepancy and its reasons, and conclude useful experiences from the team's utilization of resources and tools. 2. Organize and list out the materials and references used when preparing for the competition. 3. Review the actual outcome of the team's budget, fundraising, cost control, and financial management plans against their expected outcome, analyze any actual discrepancy and its reasons, and conclude useful experiences from the handling of the team's finances.	20
	Team Rules and Regulations	Review the team's charter and rules formulated in its season plan, list out rules that were implemented and those that were mere formalities, analyze the reasons for such discrepancies, and conclude useful experiences from the administration of the rules.	10
	Academic Innovation	List the academic references used for the competition, including patents, papers, open-source technical literature, etc. The amount of references provided will be taken into consideration in the assessment	15

Appendix 2 Award Selection

Individual winners or team winners of each award are required to share their experiences relevant to the award.

A.Open Source Awards

1. Selection Criteria

The RMOC will score the open source materials according to the following two criteria: basic format and content.

For the selection criteria, see "RoboMaster University Series Open Source Awards Rules and Selection Criteria".

2. Application Process

1. Teams from Mainland China are required to upload their open-source files to the relevant section in "Forum - Share technical/operational content", while teams from Hong Kong, Macau, Taiwan and overseas should send their files to robomaster@dji.com, and name their files in this format: RM2023 + college name + team name + open-source content type + content description

2. To apply, teams are required to complete a questionnaire (to be released).

3. The RMOC will assess and select the winners based on the application questionnaires and quality of the open-source content submitted by the teams.

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1. The engineering processes involved in the software segment must be uploaded to github and set as public.

2. The engineering files in the mechanical and hardware direction need to be uploaded to the Baidu network disk.

B. Outstanding Contribution Awards

Appendix Table 6 Outstanding Contribution Awards Selection Criteria

Prize	Selection Criteria	Selection Method
Outstanding Supervisor	● The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. ● Guides the student team and instills team culture, displays a high sense of responsibility, is caring towards each team member, cares about the growth and development of students in the field of competition, and is deeply revered by said students ● The awards aim to open up employment opportunities for outstanding team members. The CVs of the nominated talent need to be submitted.	● To apply, teams are required to complete a questionnaire (to be updated). ● After the application is submitted, the RMOC will select the winners based on their submitted questionnaires.
Outstanding Captain (Team)	● The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. ● The team demonstrates a positive culture and values, and the Captain shows a strong sense of belonging toward the competition and their team.	● To apply, teams are required to complete a questionnaire (to be updated). ● After the application is submitted, the RMOC will select the winners based on their submitted questionnaires. ● Performance level: 1. Regional Competition Third Prize 2. Regional Competition Second Prize/Final Tournament Third Prize 3. Final Tournament Second Prize 4. Final Tournament First Prize 5. Final Tournament Champion, First Runner-up, Second Runner-up

	• The Captain's team actively cooperates with the RMOC and is willing to share knowledge, create a good communication atmosphere in the team circle; ensure the official information access rate within the team; completes the participation process on time • Compared to the past season, their team remains at the same level or have made progress in terms of the final result grade	
Outstanding Project Manager	• The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. • Employs good project management methods, controls the overall progress of the project, comprehensively considers R&D costs, work safety, etc., and comprehensively manages the whole work.	• To apply, teams are required to complete a questionnaire (to be updated). • After the application is submitted, the RMOC will select the winners based on their submitted questionnaires.
Outstanding PR Team	• The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. • Submits publicity reports on time, active in planning the team's PR work to increase the team's influence. • Dedicated to building the team's culture.	Selected according to the PR team's assessment score ranking and comprehensive performance evaluation

Outstanding Business Team	- The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. - Actively plans the investment promotion within the team, integrates the internal and external resources of the team, locates investment partners through various channels in order to provide technical support and fund sponsorship for the team.	- To apply, teams are required to complete a questionnaire (to be updated). - After the application is submitted, the RMOC will select the winners according the Application Form
Outstanding Advisor	- The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. - In the aspects of technological innovation, tactical design, team management, team building, etc., the advisor provides constructive and practical suggestions to the team, and provides guidance and support to the team in strategy, technology and management.	- To apply, teams are required to complete a questionnaire (to be updated). - After the application is submitted, the RMOC will select the winners according the Application Form
Outstanding Volunteer	- Those who have participated in the voluntary work; understand, respect and love the RoboMaster; and actively co-operate with RMOC - The voluteer is diligent and pragmatic, displays teamwork spirit, and shows outstanding performance in volunteer work - Displays no dereliction of duty, misconduct, or major work mistakes	The staff of the RMOC make nominations and select winning candidates based on the nomination materials.

C.Organization Awards

Appendix Table 7 Organization Award Selection Criteria

Prize	Selection Criteria	Selection Method
Rookie Award	● The team has qualified for the Regional Competitions for three consecutive years (including the current season) ● The result of the current season is at least one level higher than that of the past season	● The team with more overall progress will be given priority for the award ● Performance level: 1. Regional Competition Second Prize/Final Tournament Third Prize 2. Final Tournament Second Prize 3. Final Tournament First Prize 4. Final Tournament Champion, First Runner-up, Second Runner-up
Mainstay Award	Teams that have participated for three years (including this season), having ranked at the 8th to 32nd position in the Final Tournament for the 2021 season, qualified for the Final Tournament in 2022, and ranked 8th to 32nd in the Final Tournament for the 2023 season.	Teams with a longer participation period and teams with better scores will be given priority
Competitive Spirit Award	● The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. ● The team is active in forums, WeChat groups, etc., and interacts well with the RMOC, volunteers, and other teams ● The team is helpful, active and an open source of information for others, enthusiastically sharing their experiences and willing to provide resources to other teams	● Selections to be made according to the feedback given by the staff of the RMOC, other teams, and volunteers of the competition. ● Teams with more positive feedback from the RMOC staff, other teams, and event volunteers will be given priority

Prize	Selection Criteria	Selection Method
Cost Control Award	• Cost data is clear and complete and can reflect the result of cost overview or cost control • High executability of the cost control scheme and methods. • During the match prepation stage, actively open source the effective and replicable cost control method and case	• Score of cost relevant content in each Technical Assessment section • Teams are required to submit materials for appraisal, such as cost reports, etc.
Top Tactician Award	• The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. • The team achieves good team results via tactical operations • The team's tactics are instructive to other participating teams, having a positive impact on the overall performance of the competition	• The team submits assessment material, like tactics development process, performing action related to tactics (Operator training), etc. • The RMOC selects the best accoding to competition performance and materials
Discipline Building Award	• The team displays a good competitive spirit, with no serious violations of competition rules and proper standards of conduct. • The team or its lab has extensive robotics-related competition experience. • The team or its lab has extensive patents, publications or scientific research records in the field of robotics. • The team or its lab is an abundant source of information on entrepreneurship, employment and further education.	• The selection will be made by the RMOC based on the various team information collected relating to each aspect. • Preference is given to teams with abundant information and that perform well in multiple aspects.

Prize	Selection Criteria	Selection Method
	• The team's supervisor establishes relevant RoboMaster courses or incorporates subject knowledge from RoboMaster into the curriculum, or creates a RoboMaster research lab, etc.	
Recruitment Participation Award	All members of the team have participated actively in DJI's university recruitment drives and sent in an exceptional amount of applications.	The team members (limited only to 2024 graduates) have submitted their resumes for the 2024 recruitment drive (including for positions offered at the recruitment drive as well as special positions). Any application successfully accepted into the preliminary screening process will be deemed a valid submission. The RMOC will judge this award based on the number of effective submissions sent by each team through RoboMaster's recruitment channel.
Best Talent Scout Award	The Supervisor was active in training the team members and recommending them for DJI's university recruitment drives; the team members have received an exceptional number of offers.	A recommendation will be deemed successful if the recommended team member (limited only to 2024 graduates) received an offer from DJI through the 2024 university recruitment drive (including for positions offered at recruitment drive as well as special positions), according to the processes in the "RoboMaster University Series Supervisor Recommendation System". The RMOC will judge the award based on the number of successful recommendations made by each Supervisor. Note: Only applicable to teams from Mainland China, and from Hong Kong, Macau, Taiwan

Prize	Selection Criteria	Selection Method
Best Season Schedule Award	Teams that share their Season Schedule as open-source content, with scores for this section of the Technical Assessment ranking among the top of all open-source teams.	The RMOC will collect the open source materials from the RoboMaster forum and make the selection according to rankings *Open source post title: [Season Schedule + College Name Team Name + RM2023 Season Schedule Open Source]
Best Technical Report Award	Teams that share their technical report in the "Seasonal Summary" section as open-source content, with scores ranking among the top of all open-source teams.	The RMOC will collect the open source materials from the RoboMaster forum and make the selection according to rankings *Open source post title: [Technical Report + College Name Team Name + RM2023 Technical Report Open Source]

D.Robot Combat Award

Each robot type is ranked in accordance with the data selected from their performance in the competition. Robots that are qualified and meet the minimum eligibility requirements for the award must fulfill the inspection criteria. The number of winners selected will depend on a specific ratio against the total number of candidates.

🔆 The data is selected from the Regional Competitions.

Appendix Table 8 Selected Robotic Data

Robot Type	Selected Data Type
Standard robot	Average level of damage in each round
Engineer robot	Average mineral redemption scores in each round (Silver Mineral：5 points for Level 0, 10 points for Level 1, 15 points for Level 2, 20 points for Level 3, and 25 points for Level 4; Gold Mineral: 6 points for Level 0, 12 points for Level 1, 18 points for Level 2, 24 points for Level 3, and 30 points for Level 4).
Hero Robot	Average level of damage in each round
Aerial Robot	Average level of damage per takeoff

Robot Type	Selected Data Type
Sentry Robot	Average level of damage/damage borne in each round (only taking into consideration the rounds in which the amount of damage suffered by the Sentry Robot exceeds 100)
Dart System	Scores from average target hits in a round (1 point for hitting an Outpost, and 10 points for a Base).

E. Best Design Creativity Awards

a） Selection Criteria

The judging criteria for the Best Design Creativity Awards include but are not limited to aesthetic design, structural design, and functional innovation for a single robot type or an entire team. Teams that have shown creative designs in any area can apply for these Awards.

Appendix Table 9 Best Design Creativity Awards Selection Criteria

Item of Consideration	Selection Criteria
Design Aesthetic	Innovative designs with an aesthetic appearance, and distinctive style or diverse details
Innovation	The structure is innovative, where tasks are performed with new methods or previously non-viable tasks are now achievable.
Practicality	Practical and efficient, and the robot's actual performance is ranked in the top 10% of similar robots in the current season.
Influence	The team has a significant influence on other teams and is a reference standard followed by many.

b） Selection Process

Teams that wish to participate in the Best Design Creativity Award are required to adhere to the following process:

1. Teams must first submit an application questionnaire (to be updated).

2. The judging panel of the RMOC shall then score the robots of the participating teams.

F. Annual Technical Breakthrough Awards

a） Selection Criteria

The teams' robot designs are guided by theory and performed outstandingly well in the competition, displaying technical innovation and breakthrough.
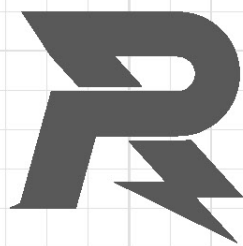
b） Selection Process

The RMOC will score and rank the teams based on the project analysis section of their Team Season Summary and the Technical Report of their Season Summary, and select the First, Second and Third Prize winners based on their performance in the competition.

Appendix 3 Safety Instruction

Every team member participating in the RoboMaster must fully understand and accept that safety is the prerequisite for the sustainable development of the RoboMaster. In order to protect the rights and interests of all team members and the event organizers, and according to relevant laws and regulations, all team members who have registered for the RoboMaster University Championship will be deemed to have acknowledged and agreed to abide by the following safety terms:

1. All teams members who have registered to participate in the RoboMaster competition must confirm that they have full capacity for civil conduct and they are able to build and operate robots independently. They must also make sure that they have read in detail the Registration Guide, Competition Regulations among other important documents stating the rules and regulations of the competition, before starting to use any products by SZ DJI Technology Co., Ltd. to build robots.

2. During the competition, all participants should make sure that their actions including the creation, testing, and use of robots will not cause any injury or damage to his or her teammates, members of the opposing teams, staff, audience, equipment, or the competition venue.

3. All teams must ensure that the structural design of their robots will not hinder safety inspection during Pre-match Inspection, and agree to fully cooperate with the Pre-match Inspection carried out by RoboMaster's organizers.

4. All teams guarantee that they will not use any internal combustion engines, explosives, or high-pressure gas as working gas, or any dangerous materials.

5. During any stage of the R&D, preparation or competition period, all team members must be fully aware of any potential safety issues, and the team's Supervisor is responsible for instructing and supervising the team on safety issues.

6. All teams must guarantee the safety of all robots. This includes ensuring the projectile launchers installed on robots are safe, and that they will not cause any harm either directly or indirectly to any Operator, referee, staff member or audience member.

7. All teams will take sufficient and necessary safety measures during the R&D, training and competition periods regarding any hazardous situations that may occur. These include but are not limited to: preventing the control system from becoming unstable; anticipating every operation step prior to execution to avoid errors or collisions between team members or between robots and team members; prohibiting team members from engaging in solo training and making sure personnel are available as emergency responders to any situation; wearing goggles and helmets; applying the spotlight lock function and adding an emergency stop function other measures in a robot during debugging.

8. Teams will be held responsible for all accidents and losses resulting from the technical faults of robots, loss of control of UAVs or any other unexpected circumstances.

9. The materials bought from or provided by the organizer SZ DJI Technology Co., Ltd., such as batteries and the Referee System, must be used in accordance with their instructions. SZ DJI Technology Co., Ltd. will not be held responsible for any injuries that arise from improper use of these materials. Teams will be held responsible for any injuries caused to their own members or any third party and for any property loss arising from creating and operating any robots.

10. All team members must remain in strict compliance with the laws and regulations of the country or region. All team members pledge that their robots will only be used for the RoboMaster competitions and that their robots will not be illegally modified or used for any illicit purpose.