SensUs Student Competition 2024



1. Definitions

- 1.1. SensUs, SensUs 2024, and the SensUs Student Competition are defined as the SensUs project as a whole.
- 1.2. The **SensUs Organization** is defined as the group of students responsible for organizing the SensUs Student Competition.
- 1.3. A **SensUs Team** or **team** is defined as a group of students participating in the SensUs Student Competition.
- 1.4. The **SensUs Innovation Days** are defined as the period when all teams gather in Eindhoven (The Netherlands) to conclude the SensUs Student Competition.
- 1.5. The **SensUs Event** is defined as the period of the SensUs Innovation Days open to the public.
- 1.6. The **Eindhoven Testing Event (ETE)** or **Testing Event** is defined as the period during the SensUs Innovation Days where the teams compete with each other by utilizing their biosensor prototypes.
- 1.7. The **Distributed Testing Event (DTE)** is defined as the period before the SensUs Innovation Days where the teams compete with each other by utilizing their (preliminary) biosensor prototypes to practice for the Eindhoven Testing Event.
- 1.8. A **team supervisor** is defined as the university professor (full, associate, or assistant) who has sole educational end-responsibility for the activities of a SensUs team.
- 1.9. A **team coach** is defined as a person with a coaching or guiding role toward a SensUs Team.
- 1.10. The **team captains** are defined as the students in a team who act as the first point of contact with the SensUs Organization.
- 1.11. The **SensUs website** is defined as the main website of SensUs: https://www.sensus.org
- 1.12. The **Team Results Document** is defined as the document containing information provided by every team regarding the biosensor system and assay designs, technological feasibility, originality, translation potential and contributions.
- 1.13. The **Team Information Document** is the medium that is used to provide and collect information. Only the SensUs Organization can access the Team Information Document.

2. Teams

- 2.1.A maximum size of 15 students is allowed for participating teams. The SensUs Organization recommends having at least 8 students in a team.
 - 2.1.1. Students can participate in a team when enrolled in a Bachelor's or





Master's program during the SensUs Student Competition.

- 2.1.2. Students enrolled in a Master's program cannot participate in SensUs 2024 if they graduate before June 1st, 2024.
- 2.1.3. Ph.D. students cannot participate in a team, with one exception: Ph.D. students can participate in a team if they are enrolled in a Ph.D. program and obtained their Bachelor's degree no more than 12 months before the SensUs Innovation Days.
- 2.1.4. Students who have participated in previous editions of SensUs are allowed to participate in the SensUs 2024, provided they meet the above mentioned requirements.
- 2.2. For each university team, a university professor acts as the team supervisor as defined in 1.8. The supervisor is responsible for the participating team's formation, supervision, and guidance. Note: The SensUs Organization advises that team supervisors involve additional staff members in the guidance and coaching of the team (e.g., another professor, a postdoc, or a Ph.D. student).
- 2.3. In each participating team, one student acts as the primary contact person for the SensUs Organization, and one student acts as a contact backup.
- 2.4. By joining a team, every team member consents to be shown on the SensUs website, including first names, surnames, and pictures.
 - 2.4.1. If a team member would like to object to being shown on the website, the person is responsible for communicating this information to the SensUs Organization.
- 2.5. Each team is responsible for choosing a team name. This name will publicly represent the team, e.g., on the SensUs website and during the SensUs Event.
 - 2.5.1. Team names will be proposed by the team and accepted or rejected by the SensUs Organization.
 - 2.5.2. The proposed team name can be rejected if there is an insufficient distinction between the names of different teams.
 - 2.5.3. The proposed team name can be rejected if the SensUs Organization deems the name to conflict with the vision and mission of the SensUs Student Competition.
 - 2.5.4. The proposed team name cannot refer to a non-academic sponsor directly. However, it is allowed to reference a non-academic sponsor indirectly.
 - 2.5.5. The final judgment about the proposed team name is at the discretion of the SensUs Organization.
- 2.6. Teams and SensUs Organization should try to avoid conflicting or confusing approaches toward the same sponsoring partners. For example, before approaching a potential partner, all should check on each other's websites if a partner is already involved in SensUs.





2.7. By joining as a SensUs team, every team member accepts the Rules & Regulations of SensUs.

3. The Competition and Testing Event

- 3.1. During the SensUs Student Competition, every team designs and builds a prototype biosensor system for measuring a given biomarker in a given matrix.
- 3.2. A biosensor system must meet the requirements in the Biosensor Specifications section in the Information Package to be allowed to the Testing Event.
 - 3.2.1. The aim of SensUs is that teams develop biosensing assays themselves. Teams should not use assays from third parties without making any effort themselves and without understanding the molecular details.

An exception is made for generic commercially available reagents that represent only a small part of an assay, such as a blocking buffer or a conjugation reagent. Suppliers of such reagents give information about the main components but often do not give all molecular details. Such generic reagents are allowed for usage in the SensUs Student Competition, provided that (i) the team knows the main components and their molecular mechanisms, (ii) the used reagents represent only a small part of the biosensing assay, and (iii) the team knows alternative solutions in case the supplier would stop providing the reagents.

- 3.2.2. Teams may use biomaterials from third parties (e.g., antibodies) in their biosensor system, provided that the requirements under 3.2.1 are met.
- 3.3. The Testing Event includes the testing of prototype biosensor systems and presentations for an audience.
- 3.4. Teams will be judged on data extracted from their biosensor system during the Testing Event and on supporting information, e.g., posters and presentations.
 - 3.4.1. The jury is composed by the SensUs Organization to create a judgment with the representation of different stakeholders, e.g., university professors, representatives from companies, and healthcare professionals.
 - 3.4.2. Teams should provide information to the jury transparently and truthfully at the discretion of the jury and the SensUs Organization. Fraudulent or misleading behavior can lead to the disqualification of the team.
- 3.5. Traveling to and from The Netherlands should be arranged and paid for by the participating teams. The SensUs Organization arranges a place to stay for the teams during the Testing Event. The teams are responsible for making a reservation for their stay themselves.
- 3.6. Teams are required to pay a Registration Fee to join an edition of the SensUs Competition. The fees are non-refundable. The fees and their payment deadlines are stated in the Information Package.

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4. Safety

- 4.1. The participating teams must follow all safety and insurance rules of their institution and their respective countries. Failure to do so can result in disqualification from the competition at the discretion of the SensUs Organization.
- 4.2. For every team, the team supervisor ensures that the team members follow all required safety trainings and are covered by insurances necessary for their SensUs activities.
- 4.3. Teams are required to minimize the use of harmful chemicals.
- 4.4. Teams are required to build their prototype biosensor system so that the device can function outside of a laboratory environment. All equipment must be able to function safely in a public setting.
- 4.5. Every team must inform the SensUs Organization about the potential safety risks of their biosensor system. This information must be provided to the SensUs Organization at least two weeks before the Testing Event.
- 4.6. During the stay in the Netherlands for the SensUs Event, teams are required to follow all safety rules set by the SensUs Organization and the location of the SensUs Innovation Days.
- 4.7. During the SensUs Innovation Days, all teams, jury members, partners, and the public consent to conform to the safety regulations by the Dutch government and the Eindhoven University of Technology. Any misconduct of the regulations may result in disqualification or removal from the SensUs Student Competition.

5. Intellectual property

- 5.1. The SensUs Student Competition occurs in the public domain. Therefore, the demonstrations and presentations of the biosensor systems occur in the public domain.
- 5.2. If a participating team or its university wants to secure patent rights, it is the team's responsibility to do so. The SensUs Organization is not involved in securing patent rights and does not cover any IP-related costs of the teams.
- 5.3. The Team Results Documents (defined in 1.13) are made publicly available on the SensUs Digital Platform (defined in 1.12) prior to the SensUs Event.

6. Deadlines, changes, cancellation

- 6.1. The SensUs Organization reserves the right to impose consequences on a team when it misses a deadline or fails to follow the rules.
- 6.2. The SensUs Organization reserves the right to cancel or change the SensUs Innovation Days in circumstances that strongly affect the competition.
- 6.3. The Rules and Regulations may be subject to change at the discretion of the SensUs





- Organization. The participating teams will be informed about these changes. The latest version of the Rules and Regulations is available on the SensUs website.
- 6.4. The SensUs Organization cannot guarantee an equal experience for online participants and participants that are present in Eindhoven.

7. Responsibility

- 7.1. The SensUs Organization is not liable for any loss or damage caused by participants or by visitors or by other people who are not part of SensUs Organization. This includes material as well as non-material losses and damages. Examples of materials are materials used during the SensUs Innovation Days, personal belongings, chemicals, biosensor systems.
- 7.2. During the SensUs Innovation Days, the SensUs Organization is not liable for losses or damages that occur outside the formal program activities of the SensUs Innovation Days, i.e. outside in place or outside in time. This includes for example activities in free time and activities outside the campus of Eindhoven University of Technology. It also includes activities that are not organized by the SensUs Organization and activities that are not controlled by the SensUs Organization.
- 7.3. The maximum liability of SensUs Organization toward a single team is equal to the Team Registration Fee paid by the team. The maximum liability of SensUs Organization toward a single participating student is equal to the Participation Fee paid by the student.
- 7.4. Team members are responsible for their belongings during their stay in The Netherlands.
- 7.5. Participants have to arrange all necessary insurances themselves. The SensUs Organization recommends that the team members have suitable travel, health, and liability insurances during their stay in the Netherlands.

8. Promotion / Social media

- 8.1. Please contact the SensUs Organization for the use of any component of the SensUs identity, including but not limited to: the SensUs logo, photos or video recordings of the SensUs Innovation Days, logos, and images of partners.
- 8.2. Teams are encouraged to share content with the SensUs Organization for cross-promotion. Whether a post is shared is at the discretion of the Organization.