IEEE Student Ethics Competition

Participant Guide – Live Event

I **Purpose**: To present and defend an analysis of a situation in professional ethics.

II **Topic**: A hypothetical case generally dealing with (1) Public Safety and Welfare, (2) Conflict of Interest, (3) Engineering Practice, or (4) Research Ethics. The selected case will have two or more ethical questions or components.

III **Preparation**:

A. Two hours to analyze a selected case and prepare a visual presentation
(access will be provided to a computer with no internet connection)

B. Collaboration is limited to members of individual teams

C. Resources are limited to written competition materials
(Internet access, books, etc. are not allowed)

D. All teams will receive the same case

E. Teams will not be allowed to collaborate, practice, or modify their presentation, etc. after the presentation files are collected. Teams may observe other presentations after their own presentation.

IV **Requirements**:

A. Visual presentation with significant speaking involvement of all team members

B. Presentation time 8-12 minutes

C. The order of presentation among the teams will be randomly chosen

D. Required Components (see example case studies)

Case Facts – restatement of relevant facts

Question(s) – summary of ethical questions

References – identification of relevant sections from the IEEE Code of Ethics

Discussion – analysis of case. The analysis of the case should be performed using the IEEE Code of Ethics

Conclusion – a position statement on each of the identified ethical questions and recommendation for action.

V **Oral Defense**

A. The judges will ask questions relating to the selected case and the presented analysis

B. Each team member must respond to at least one question

C. Time for the defense period will be approximately 5 minutes.

D. Only judges may ask questions.

VI **Comments**

A. Timing lights or other indications will be provided.

IEEE Student Ethics Competition

Competition Case and Analysis Format

Case Criteria

The competition case should meet the following criteria:

- Each case must contain multiple ethical questions that students can identify.
- The case should not depend on specialized technical knowledge to make a determination.
- The ethical issues should not be intentionally vague (i.e., the results of the analysis should not require significant assumptions).
- The anticipated analysis would not result in findings that all of the ethical questions have a negative or a positive result.
- The case must be fictitious. Although a case may draw inspiration from real-world situations, any case based on actual events is prohibited.

The recommended length of the case descriptions should not exceed one page. Also, the case must contain all needed information to make a determination, as no outside references are allowed in the competition.

Analysis Format

CASE FACTS: Restatement of relevant facts

QUESTIONS: Summary of ethical questions

REFERENCES: Relevant sections of the IEEE Code of Ethics

DISCUSSION: Analysis of case. Any assumptions or special perspectives must be explicitly stated

CONCLUSION: Position statement on each identified ethical question

IEEE Student Ethics Competition Judging Form – Live Event
2-Member Team Option

Team Name/Number: _____

Team Member Names: _____

Categories	Scores
Deductions	
Time Adherence (deduction of 5 points for every 30 seconds outside of the time limits)	**(-)**
Lack of significant involvement of all team members in presentations (10-point maximum deduction)	**(-)**
Team Presentation (70 points max.)	
Case facts – restatement of relevant facts (5 points)	/5
Question(s) – summary of ethical questions (10 points)	/10
References – identification of relevant sections from IEEE Code of Ethics (5 points)	/5
Discussion – complete analysis of case with logic/reasons (20 points)	/20
Organization and clear conclusion (5 points)	/5
Knowledge and mastery of content (5 points)	/5
Communication effectiveness – delivery and presentation quality (includes terminology, appearance, voice, physical, use of visuals, etc.) Team Member #1 (10 points) Team Member #2 (10 Points)	 /10 /10
Oral Defense (30 points max.)	
Team Member #1 (15 points) Team Member #2 (15 points)	/15 /15
TOTAL SCORE (100 points possible)	/100

Each judge will rank the teams and award 5 points to first, 4 points to second, 3 points to third, 2 points to fourth, and 1 point to fifth. All the judges' points awarded will be tallied and the winners determined by the scores. Ties will be resolved by majority vote of the judges. All questions of eligibility, adherence to rules, etc. will be resolved by majority vote of the judges.

Judge's Name: _____ **Signature:** _____

Team Rank: (Circle Choice)

First (5 points) Second (4 points) Third (3 points)
Fourth (2 points) Fifth (1 Point) Other (0 points)

Team Points: _____

IEEE Code of Ethics

We, the members of the IEEE, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members, and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:

I. To uphold the highest standards of integrity, responsible behavior, and ethical conduct in professional activities.

1. to hold paramount, the safety, health, and welfare of the public, to strive to comply with ethical design and sustainable development practices, to protect the privacy of others, and to disclose promptly factors that might endanger the public or the environment;

2. to improve the understanding by individuals and society of the capabilities and societal implications of conventional and emerging technologies, including intelligent systems;

3. to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;

4. to avoid unlawful conduct in professional activities, and to reject bribery in all its forms;

5. to seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, to be honest, and realistic in stating claims or estimates based on available data, and to credit properly the contributions of others;

6. to maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;

II. To treat all persons fairly and with respect, to avoid harassment or discrimination, and to avoid injuring others.

7. to treat all persons fairly and with respect, and to not engage in discrimination based on characteristics such as race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression;

8. to not engage in harassment of any kind, including sexual harassment or bullying behavior;

9. to avoid injuring others, their property, reputation, or employment by false or malicious actions, rumors, or any other verbal or physical abuses;

III. To strive to ensure this code is upheld by colleagues and co-workers.

10. to support colleagues and co-workers in following this code of ethics, to strive to ensure the code is upheld, and to not retaliate against individuals reporting a violation.

Adopted by the IEEE Board of Directors June 2020

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IEEE STUDENT ETHICS COMPETITION SAMPLE CASES

CASE DESCRIPTION

A graduating engineering student is interviewing with several companies for an entry-level position. He receives an attractive offer from company A. Since the job market is very competitive, he feels it unlikely that another company will give an offer, much less an attractive one. The student accepts company A's offer and returns a signed letter of acceptance which documents the terms of the position. However, he receives an offer from company B one week afterwards. This new opportunity has a higher salary, more benefits, better advancement prospects, and a more desirable location. It is significantly better in all respects. Since only one week has past since the first acceptance was returned and the new opportunity is clearly in his professional and financial interests, he tells company A that he has changed his mind and accepts the offer of company B. Company A does not express any criticism of the student's actions.

Did the student act unethically?

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ETHICAL QUESTIONS TO BE IDENTIFIED BY STUDENTS

Is the student ethically bound to honor the signed letter of acceptance with company A?
Has company A been harmed by the student's action?

EXAMPLE ANALYSIS AND PRESENTATION OUTLINE FOR SAMPLE CASE

CASE FACTS: Restatement of Relevant Facts

The student formally accepted a position in which all significant terms of employment were specified. The student backed out of this agreement to accept a second, more desirable offer.

QUESTIONS: Summary of ethical questions

Is the student ethically bound to honor the signed letter of acceptance with company A?
Has company A been harmed by the student's action?

REFERENCES: Relevant sections of the IEEE code

Preamble: …to the highest ethical and professional conduct …

9. to avoid injuring others, their property, reputation, or employment by false or malicious action.

DISCUSSION: Analysis of case

The student did not act in good faith with the highest standards of conduct. He made a commitment to company A, which presumably was acted on by the company. The professional and financial self-interest of the student was no excuse. While the company probably has a legal case against the student, it has little to gain by pursuing litigation. Despite the short (one week) length of time, company A invested time and resources in processing employment paperwork and may have turned away other applicants for the position. The student thereby injured both the company and other potential employees.

CONCLUSION: Position statement on the identified ethical questions

The student was ethically bound to honor the first acceptance. He had formally completed an agreement. Company A gave no cause for a change in this agreement.
Company A potentially suffered harm in that other applicants for the position were turned away or found other employment.

IEEE STUDENT ETHICS COMPETITION RESOURCES

Glossary of Selected Terms

Many expert resources exist, see for example: The Online Ethics Center for Engineering and Science at Case Western Reserve University glossary at:
http://www.onlineethics.org/glossary.html

COMPLAINANT
As used in an IEEE ethics investigation, anyone who files an official complaint concerning the action or actions of another person who is a member of the IEEE. In general, any person who provides witness to a wrongdoing or problem.

CONFIDENTIAL
Information that must have its access limited to only those who have a need-to-know is considered confidential. Confidential information may be personal, financial, trade-secret technical, or other information that could cause unnecessary embarrassment or negative financial impact if disclosed beyond the control group. Confidential information that must be shared with another person must be shared only when they understand its confidential nature and agree to handle the information accordingly.

CONFLICT OF INTEREST
When a person or group is involved in a decision making process on behalf of others and they have or appear to have a personal or financial interest in the outcome, they could be considered to have a conflict of interest, in making said decision(s). The issue of conflict of interest may be mitigated by full disclosure of any such conflict(s) to the affected group, who may determine its interests are best served by allowing the person or group to retain the decision-making responsibility.

FABRICATION
Information concerning or gained by any event that is untrue or unfounded by fact or other witness may be considered a fabrication. All information concerning ethical behavior must be founded on physical facts and/or on an oath of truth when provided by an eyewitness. As used herein, fabrications do not refer to the assembly of a product.

FALSIFICATION
Testimony or other official information provided to facilitate an ethics investigation that is not true and accurate, by design or accident, is a falsification. Any act by an individual or group of individuals that represents or portrays as fact information that is not known to be true and accurate may be perpetrating an act of falsification.

NEGLIGENCE
An act that in which a responsibility is not discharged because of lack of prudent discharge of one's responsibilities and authorities, whether through ignorance or by intention, is an act of negligence.

PLAGIARISM
IEEE defines plagiarism as the reuse of someone else's prior ideas, processes, results, or words without explicitly acknowledging the original author and source. Plagiarism in any IEEE publication is unacceptable and considered a serious breach of professional conduct, with potentially severe legal consequences.

PROFESSION
A service or action offered by an individual for pay that requires a high degree of competence in a complex field normally established through advanced education and extensive experience.

PROFESSIONAL ENGINEER
An engineer who is certified by license by an authority, such an authorized agency of a state government in the United States, as having met a set of qualifying requirements as demonstrated by education, experience, and satisfactory performance on a written examination.

RESPONSIBILITY, OFFICIAL
What your job requirements are or what your corporation says you are supposed to do as it relates to them. The set of standards that are required by a particular assignment i.e. it is the responsibility of a U.S. Ambassador to represent the U.S.

RESPONSIBILITY, PROFESSIONAL
What is expected of me as defined by my profession. For example, a nurse has the professional responsibility to help someone who may be in need of services only they can render, e.g., CPR.

SAFETY
Making sure your working environment and work practices ensure that nobody (company employees, contract employees, and visitors) is injured while performing any type of task.

WHISTLE-BLOWER
Some one who exposes, to those outside the organization, any type of unsafe, unethical, or unlawful activities going on within an organization. The person who releases the information does so regardless of the ramifications (positive and/or negative) of their actions.

For further information on these terms see the On-line Ethics Center's Glossary of Terms
http://onlineethics.org/glossary.html