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The IDEA League 's Statement on Ethics

1. Preamble

The role of Science, Technology, Engineering, and Medicine in the lives of human beings in the 21st Century is unprecedented. Results from areas such as nanotechnology, neuroscience, bio-medical and genetic research, robotics, artificial intelligence and computer science will all be applied in a great variety of ways. This will reshape the world as we know it.

Leading technical universities in Europe united in the IDEA League play an important role in the creation, application, dissemination and utilization of scientific knowledge and technology. Graduates from our institutions go on to apply their education in all areas of public, commercial and industrial life not only as experts, but also as minds trained in scientific methods of problem solving. The expertise of the institutions and the graduates is used – directly or indirectly - to inform the public, to shape public policy, justify political decisions and draft regulatory frameworks.

The IDEA League partners are fully aware of the fact that research carried out at their institutions is likely to have an important influence on the well-being of individuals and society through their work: safety and health, sustainable development and integrity of the environment and the living world, freedom, autonomy and choice of citizens, privacy and personal sphere of people, now and in the future.

The IDEA League therefore encourages its students and staff and all those parties with whom it interacts, to think actively about the consequences of their work for the good of society and the well-being of individuals. The IDEA League acknowledges that adequate ethical reflection and analysis concerning moral and social questions associated with science and technology and their application require systematic study in conjunction with their scientific, technical and economic aspects.

2. Responsibility and Accountability

The IDEA League partners acknowledge that "taking responsibility" requires appropriate moral capabilities in individual researchers: attitudes, sensibilities, knowledge and cognitive skills; optimally, this implies a grounding in philosophical, social and historical education. It also involves an adequate accountability infrastructure: appropriate institutional arrangements, incentive structures, public principles, codes of conduct, and ethics committees. The IDEA League partners therefore commit themselves to upholding the idea of science as a vocation through:

- a) stimulating and supporting individuals in their ethical reflection, analysis and the thoughtful application of (i) their knowledge and skills and (ii) relevant ethical codes, laws and regulations;
- b) seeing to it that relevant guidelines and codes (e.g. regarding scientific conduct, personal integrity, experiments with humans and animals, professional relationships among colleagues and between staff & students, and researchers & sponsors) as well as institutional mechanisms (e.g. committees and oversight boards) to facilitate, monitor or enforce their application, are put in place;

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- c) seeing to it that the governance model of IDEA
 League universities, and the organisational entities they collectively form or are part of, encourage ethical behaviour of staff members;
- d) actively communicating endorsed codes, best moral practices and raising awareness of their existence and motivating individuals to act in accordance with them when and where appropriate;
- e) encouraging staff & students to participate in public education, debates, and in being an active citizen in their community and the world.

3. Values and Design

The IDEA League partners

- a) recognise that ethics needs to be part of design, research, development and production from an early stage. High technology and advanced applied science require ethical analysis and reflection in advance and not just as technology assessment 'after the fact'. This should happen at a stage where the course of events can still be changed in the light of the results of the analysis and reflection.
- b) acknowledge that this pro-active and design-oriented conception of ethics is an essential element of responsible science and technology and responsible innovation in the 21st century. When and where appropriate, the IDEA League partners will facilitate the incorporation of ethical reflection in research, development and design.
- c) are convinced that science and technology can lead to valuable innovative solutions to social problems and to reconciliation of seemingly conflicting public values.

4. Ethics Education and Awareness

The IDEA League actively seeks to support staff and students by creating a climate where ethical, legal and societal issues are studied in the context of research, development, and design. The IDEA League partners commit themselves to offering courses on ethics and society for their students and appropriate forms of training for staff.

The IDEA League commits itself to train and educate engineers, scientists, and doctors who are thoughtful, imaginative, and careful, are used to thinking about ethical and societal aspects of their work, are skilled in reflecting on these issues and are able to express and discuss moral considerations and constraints related to their work.

5. Trust in Science, Technology, Engineering, and Medicine

The IDEA League partners are aware of the fact that support for their work depends on trust. Constitutive for trust is the belief or assumption that the trusted are acting on the basis of moral considerations and are motivated to do what is right. For any university, ethics as mentioned under 1-4 above must not only be practically institutionalised, but must also be communicated and exemplified in an open and transparent way.

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