



**General Programmatic Terms and Conditions (PTCs) for the Ethics in Science, Mathematics, and Engineering Online Resource Center (Ethics Resource) Cooperative Agreements (NSF 10-547)**

1. Key Personnel: Except for the Principal Investigator(s) (PIs) or Co-PIs identified in this award, requests to make any changes to personnel, organizations, and/or partnerships specifically named in the proposal, that have been approved as part of this award, shall be submitted in writing to the cognizant NSF Program Official for approval prior to any changes taking effect. Requests for prior approval of changes to the PI(s) must be submitted through FastLane for review by the cognizant NSF Program Official and approval by an NSF Grants Officer.
2. Program/Project Description. This cooperative agreement supports the creation of a fully functioning Ethics in Science, Mathematics, and Engineering Online Resource Center. The 21st Century finds science, mathematics, and engineering facing more and more complex ethical and social issues. Science and engineering practices are also increasingly multidisciplinary and operate in many organizational, national, and international contexts. This diversity of interests creates a need for connections among the fields, disciplines, organizations, situations, and nations in which these ethical concerns arise. The Ethics in Science, Mathematics, and Engineering Online Resource Center will help educators, researchers, administrators, undergraduate and graduate students, postdoctoral fellows, and practicing scientists and engineers understand the scope of existing knowledge about both ethics and ethics education in science, mathematics, and engineering. It will develop best practices for ethics training, foster research on ethical issues in science, mathematics, and engineering in both national and international contexts, and serve as a living resource of multimedia materials that may be used to train current and future generations of scientists, mathematicians, and engineers in ethics and responsible conduct of research. One of the intents of this resource center is to help scholars and institutions meet NSF's implementation of Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (America COMPETES) Act by providing easy access to high quality case studies, best practices, and original scholarship in ethics in science, mathematics, and engineering.

3. Project Governance and Governing Responsibilities: The Awardee will ensure that an efficient and effective project governing structure is in place throughout the award period to support all critical or significant project activities. The Awardee will ensure efficient and effective performance of all project responsibilities by the governing components throughout the award period. The governing structure includes:

a. An Advisory Board. The Board is an independent body that consists of at least five prominent scholars with expertise in ethics education, ethics in science and engineering research, other social and behavioral research methods, and a range of substantive areas. The Advisory Board membership should display the diversity of the United States citizenry and not include members with financial, institutional or collaborative connections. The Board must meet at least annually. The Board's first meeting must occur within three months of the Award's start date. Board members review major project operations, approve resource content, participate in the initiation and development of resource content, and provide linkages to the research community. The Board represents the interests of the research communities that will use the online resource center by monitoring the online resource center for content relevancy and contributing to methodological developments and data dissemination strategies to keep the Ethics in Science, Mathematics, and Engineering Online Resource Center current with generally accepted ethics research and education standards. The Board monitors the management of the online resource center and assures the continuity and value of all dimensions of it. The Board serves in an advisory capacity to the PI team, but does not dictate the day-to-day management of the project. Advisory Board members must be approved by the NSF cognizant Program Official.

b. Project Management. The Ethics in Science, Mathematics, and Engineering Online Resource Center is directed by the PI and co-PIs approved under this agreement. Their major role is to manage the production of high quality resource content and design in a timely manner, to facilitate the ease of use of the online resource center by a broad scientific user community, and to submit reports to NSF in accordance with the terms and conditions of this award.

4. Reporting Requirements.

a. The PI and/or co-PIs shall submit annual and final project reports in accordance with General FATC Article 15. In addition to the regular

components of an annual report, the Awardee will also report on web metrics and analytics. The goal of the metrics and analytics is not simply to measure the total visits to the website. Instead, the goal is to measure its impact and value. Therefore, the following set of web metrics and analytics are requested in annual reports.

- Visits and Visitors - total, unique
  - Page Views - individuals, aggregates, averages
  - Time on Page and Site - overall, averages
  - Referrers - counts, websites, keywords, trends
  - Bounce Rates - aggregate, top landing pages
  - Exit Rates
  - Engagement
  - Click Density Analysis
- b. The Awardee will submit an interim report via FastLane thirty days after the award start date each year of the award, beginning with the first interim report to be submitted thirty days after the award commences. Each interim report should clearly state specific project goals and activities for the upcoming project year. This report will be reviewed by the SBE Program Officer and by the Office of Integrative Activities (OIA). Each report will also be used to gauge the accomplishments the Awardee lists in that particular year's annual report.
- c. The Awardee will submit quarterly reports in the first year of the award that include information on progress and any revisions to the timeline for the achievement of milestones.
- d. The Awardee will provide ad hoc and regular reports as designated by the NSF cognizant Program Officer with content, format, and submission timeline established by the NSF cognizant Program Officer. The Awardee will submit all required reports via FastLane using the appropriate reporting category; for any type of report not specifically mentioned in FastLane, the Awardee will use the "Interim Reporting" function to submit reports.
- e. The Advisory Board shall submit an annual report to NSF and the Awardee concerning the work carried out during the preceding year and specifying the work planned by the Board. This report shall be independent of the annual report submitted to NSF by the PI/co-PIs. The bi-annual minutes of the Board can be used for this report and shall be submitted electronically to the cognizant NSF Program Officer.

5. Awardee Support of Ongoing Management and Oversight. The Awardee will ensure full commitment and cooperation among the governing structure components, and all project staff during all ongoing NSF project management and oversight activities. The Awardee will ensure availability of all key institutional partners during any desk or on-site review as well as timely access to all project documentation.
  - a. In the third year of the award, a reverse site visit will be conducted where the Awardee will come to NSF and present a detailed progress report and a live demonstration of the online resource. The cross-Directorate Ethics Online Resource Center team will be invited to attend and to evaluate the project's progress. The Awardee will fund this visit.
  
6. Program-Specific Terms and Conditions
  - a. NSF staff provides active oversight of the Ethics in Science, Mathematics, and Engineering Online Resource Center. The project is managed by a Program Officer from the NSF Directorate for Social, Behavioral and Economic Sciences (SBE), Division of Social and Economic Sciences (SES). Involvement by NSF program staff includes participation in the meetings of the Advisory Board with the Ethics Online Resource staff, regular telephone conversations with the PIs, and convening during joint sessions at annual professional association meetings.
  - b. Appointments of new members to the Advisory Board will require approval of the cognizant NSF Program Officer. NSF shall have the discretion to replace up to half of the Board recommendations for new members with its own selections based on the pool of candidates solicited by the Board.
  - c. In the third year of the award, a reverse site visit will be conducted where the Awardee will come to NSF and present a detailed progress report and a live demonstration of the online resource. The cross-Directorate Ethics Online Resource Center team will be invited to attend and to evaluate the project's progress. The Awardee will fund this visit.
  - d. The above requirements combined with the review of interim and annual reports will serve as the basis for the subsequent year of support and will be subject to approval by the NSF Program Officer.