Ethical AI in Research and Development Training Course

Professional Development Training Course Outline

Category	Research and Data Analysis	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

As artificial intelligence continues to revolutionize research and development across disciplines, the ethical boundaries of studying sensitive topics such as mental health, race, gender, sexuality, politics, and trauma must be rigorously respected. Ethical AI in Research and Development equips professionals, academics, and technologists with the tools to ethically harness AI in sensitive research environments. With a strong focus on responsible data governance, bias mitigation, privacy preservation, and ethical model deployment, Ethical AI in Research and Development Training Course enables participants to make informed, ethically sound decisions throughout the research lifecycle.

In today’s fast-paced data-driven world, the intersection of AI ethics, sensitive data handling, and regulatory compliance is a critical concern. From academic researchers to corporate R&D leaders, this course delivers a comprehensive, practical framework to ensure AI technologies align with human rights, equity, inclusivity, and ethical integrity. Grounded in real-world case studies, this training addresses AI transparency, algorithmic accountability, and community-centered research practices to promote trust, safety, and justice in AI-powered investigations.

Programme Curriculum

Ethical AI in Research and Development Training Course

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Course Objectives

1. Understand the ethical implications of AI in sensitive research areas.
2. Define and apply responsible AI principles in R&D projects.
3. Identify and mitigate algorithmic bias in sensitive data analysis.
4. Implement privacy-preserving techniques in AI systems.
5. Navigate legal and regulatory frameworks governing AI ethics.
6. Assess the societal impact of AI applications in controversial subjects.
7. Promote fairness, transparency, and accountability in AI models.
8. Evaluate ethical considerations in automated decision-making.
9. Design inclusive AI systems for marginalized communities.
10. Apply decolonial and intersectional perspectives in AI ethics.
11. Build trust through stakeholder engagement in research design.
12. Analyze real-world case studies of ethical and unethical AI use.
13. Develop internal policies for ethical AI research and governance.

Target Audiences

1. Academic Researchers
2. AI Developers and Engineers
3. Ethics and Compliance Officers
4. Data Scientists and Analysts
5. Government Policy Makers
6. NGO and Civil Society Researchers
7. Corporate R&D Professionals
8. Graduate Students in Tech & Social Sciences

Course Duration: 5 days

Course Modules

Module 1: Foundations of Ethical AI in Sensitive Research

- Overview of AI in social and biomedical research
- Definitions of "sensitive topics" in R&D
- Principles of responsible and ethical AI
- Emerging trends in AI regulation and governance
- Human rights-based approach to AI research
- **Case Study**: Facebook's emotional contagion experiment and ethical backlash

Module 2: Data Privacy, Consent, and Anonymity

- Informed consent in data-driven research
- GDPR, HIPAA, and data privacy standards
- Techniques for anonymizing sensitive data
- Risks of re-identification in AI systems
- Consent frameworks for vulnerable populations

- **Case Study**: Strava heatmap and military base exposure

Module 3: Bias, Fairness, and Discrimination in AI

- Identifying implicit and systemic bias in datasets
- Fairness-aware machine learning techniques
- Disparate impact and equity audits in AI
- Intersectionality in model training and validation
- Tools to measure and mitigate algorithmic bias
- **Case Study**: COMPAS algorithm and racial bias in sentencing

Module 4: Transparency, Explainability & Accountability

- The importance of model interpretability
- Explainable AI (XAI) tools and techniques
- Auditing black-box algorithms in sensitive fields
- Building transparency in model deployment
- Governance frameworks for ethical oversight
- **Case Study**: Apple Card credit limit discrimination case

Module 5: Ethics in Automated Decision-Making

- Defining ethical boundaries in automation
- Risk assessment of AI-driven decision systems
- Human-in-the-loop and hybrid decision models
- Consequences of AI errors in high-risk research
- AI vs. human judgment in sensitive domains
- **Case Study**: UK A-Level grading algorithm controversy

Module 6: Inclusive and Decolonial AI Design

- Decolonizing AI development and data practices
- Cultural sensitivity in algorithmic research
- Participatory design and community input
- Representation in datasets and model outcomes
- Addressing epistemic injustice in AI
- **Case Study**: Indigenous data sovereignty in Canada

Module 7: Legal and Policy Frameworks for Ethical AI

- Global legal standards in AI ethics
- National AI strategies and ethical commitments
- AI ethics policies in academic institutions
- Compliance mechanisms for research organizations
- Institutional Review Boards (IRBs) for AI research
- **Case Study**: EU AI Act implications for sensitive research

Module 8: Real-World Applications and Ethical Dilemmas

- Ethical challenges in health tech and mental health AI
- Surveillance technologies in humanitarian crises
- Crisis mapping and data ethics in conflict zones
- Trade-offs between innovation and harm prevention
- Strategic foresight and ethical risk mitigation
- **Case Study**: COVID-19 contact tracing apps and civil liberties

Training Methodology

- Interactive expert-led sessions with Q&A
- Hands-on ethical scenario analysis
- Group discussions and role-play simulations
- Case study workshops from real-world examples
- Practical toolkit development for ethical AI
- Post-training ethical audit templates and guides

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com