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COURSE BROCHURE

Advanced Ethical Technologist Training Course for Responsible Innovation

12 – 23 September 2027
Cairo

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Registered in the United Kingdom and Saudi Arabia

Advanced Ethical Technologist Training Course for Responsible Innovation

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Ethical Technologist for responsible innovation is a 2-week advanced training course for technology professionals, product owners and risk officers who decide how AI, biometrics, connected devices and distributed ledgers touch people, and who leave with an Ethical Impact Assessment Dossier for a live product. Public trust now shifts quickly when a facial recognition gate, scoring model or sensor network is seen as unfair or intrusive. Jupiter Prime Training delivers this course for the Ethical Technologist.

Why Ethical Technologist Practice Matters Now

Three groups are raising the bar for technology ethics: citizens and customers who challenge opaque decisions about credit, hiring or surveillance, investors and partners who ask for evidence of responsible design, and employees who refuse to build products they see as harmful. An organisation that embeds ethical reasoning early avoids costly redesigns, public withdrawals and lost licences to operate; one that treats ethics as a late sign-off finds problems after launch, when they are hardest to fix. The course rests on IEEE 7000, the standard model process for addressing ethical concerns during system design, alongside value-sensitive design practice.

Who Gains Most from the Ethical Technologist Approach

- Product owners who decide which features, data uses and defaults reach customers
- Engineers and data scientists who build models, sensors and ledgers into services
- Risk and assurance specialists who must evidence responsible technology use
- Privacy and security specialists protecting personal and biometric data
- Innovation leads who chair or sit on technology ethics committees

A product group that sends its owner, an engineer and a risk specialist together gains most, because ethical trade-offs are settled faster when all three speak a shared vocabulary.

Ethical Technologist Capabilities

Participants move from abstract principles to concrete design choices, documented reasoning and review routines that survive delivery pressure.

- Assess stakeholder harms and benefits of a technology before design is fixed — product boards
- Apply value-sensitive design to turn ethical values into system requirements — engineering teams
- Test models and biometric systems for bias across affected groups — assurance functions
- Specify transparency and explanation measures people can understand — customer-facing units
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Design an ethics review board with clear mandate and escalation routes — executive sponsors
- Build an ethical impact assessment that withstands external scrutiny — regulators and partners

Key Ethical Technologist Terms

- Ethical impact assessment — a structured study of how a technology may help or harm people and society, completed before and during deployment.
- Value-sensitive design — a design method that identifies stakeholder values early and turns them into concrete technical requirements.
- Algorithmic bias — systematic errors in automated decisions that disadvantage particular groups because of data, design or deployment choices.
- Explainability — the ability to describe how a system reached an output in terms the affected person can follow.
- Function creep — the gradual use of a technology or dataset for purposes beyond those originally agreed.
- Ethics review board — a standing committee that examines high-risk technology proposals and can require changes before launch.

Ethical Technologist Day by Day

Day 1: Ethics Pressures on New Technology

- Technology Controversy Case Studies — Lessons From Withdrawn Products
- Stakeholder Trust Signals — Customers, Employees and Investors
- Ethical Theories for Practitioners — Consequences, Duties and Virtues
- Principles Landscape Review — Fairness, Autonomy, Transparency and Accountability
- Personal Ethics Stance Reflection — Where Each Participant Draws Lines

Day 2: IEEE 7000 and Value-Based Design

- IEEE 7000 Process Overview — Ethical Concerns Within System Engineering
- Concept of Operations Exploration — Who Uses and Who Is Affected
- Value Elicitation Methods — Interviews, Personas and Value Cards
- Ethical Value Requirements — Translating Values Into Testable Statements
- Risk-Based Value Prioritisation — Which Concerns Need Design Controls

Day 3: Fairness and Bias in Automated Decisions

- Sources of Bias — Data Collection, Labelling and Proxy Variables
- Fairness Metrics Comparison — Parity, Opportunity and Calibration Trade-Offs
- Bias Testing Protocols — Subgroup Performance and Error Analysis
- Mitigation Techniques — Reweighting, Constraints and Human Review
- Hiring and Lending Case Exercises — Fairness Decisions Under Pressure

Day 4: Privacy, Biometrics and Surveillance

- Biometric System Risks — Facial, Voice and Gait Recognition
- Privacy by Design Patterns — Minimisation, Purpose Limits and Retention
- Consent Design — Meaningful Choice Versus Checkbox Fatigue
- Function Creep Controls — Guarding Against Secondary Uses
- Workplace Monitoring Ethics — Productivity Tools and Employee Dignity

Day 5: Transparency and Accountability

- Explainability Techniques — Local Explanations and Counterfactuals
- Model Cards and Datasheets — Documenting Purpose, Limits and Performance
- Contestability Routes — How People Challenge Automated Outcomes
- Accountability Mapping — Owners for Each Decision Point
- Incident Disclosure Practices — Telling Affected People What Went Wrong

Day 6: Ethics of IoT, Blockchain and Immersive Technology

- Connected Device Ethics — Ambient Data Capture in Homes and Cities
- Ledger Immutability Dilemmas — Erasure Requests on Permanent Records
- Smart Contract Fairness — Automated Enforcement Without Discretion
- Extended Reality Concerns — Manipulation, Presence and Children
- Environmental Footprint Review — Energy Use of Compute-Heavy Systems

Day 7: Ethical Impact Assessment Method

- Impact Assessment Scoping — Boundaries, Stakeholders and Time Horizons
- Harm Severity and Likelihood Rating — Prioritising Ethical Risks
- Stakeholder Consultation Methods — Panels, Surveys and Co-Design
- Mitigation and Residual Risk Statement — What Remains After Controls
- Assessment Review Triggers — When to Reopen After Launch

Day 8: Ethics Review Boards and Organisational Practice

- Ethics Board Charter Design — Mandate, Membership and Veto Powers
- Case Intake and Triage — Routing Proposals by Risk Level
- Deliberation Techniques — Structured Debate and Dissent Recording
- Ethics Champions in Product Teams — Embedding Daily Judgement
- Supplier and Partner Ethics Clauses — Extending Expectations Beyond the Firm

Day 9: Sustaining Responsible Innovation

- Responsible Innovation Maturity Self-Check — Spotting Process Gaps
- Ethics Metrics and Reporting — Signals for Boards and Partners
- Training and Culture Levers — Speaking Up Without Fear
- Post-Launch Monitoring — Drift, Complaints and Unintended Uses
- Regulatory Horizon Scanning — Preparing for Emerging Technology Rules

Day 10: Practising the Ethical Impact Assessment Dossier

- Value Requirements Review — Checking Traceability to Stakeholder Concerns
- Bias and Privacy Test Results — Peer Challenge on Evidence
- Ethics Board Simulation — Defending a High-Risk Proposal
- Transparency Pack Drafting — Explanations and Contest Routes for Users
- Ethical Impact Assessment Dossier Completion — Ready for Board Sign-Off

Applying the Ethical Technologist Approach After the Course

- Run a value elicitation session with users and engineers for one product and convert the top three values into testable requirements.
- Draft an ethics review board charter with mandate, membership and triage rules, and propose it to your executive sponsor.

Ethical Technologist Questions FAQ

What does an Ethical Technologist do and why does it matter now?

An Ethical Technologist builds ethical reasoning into the design, testing and review of AI, biometrics, IoT and ledger products. It matters now because public trust and partner confidence fall quickly when new technology is seen as unfair, opaque or intrusive.

Which roles gain most from Ethical Technologist training?

Product owners, engineers, data scientists, risk and assurance specialists, privacy specialists and ethics committee members gain most. Each shapes a decision where values, data and design meet.

How does Ethical Technologist training differ from an AI governance course?

Ethical Technologist training works at the level of product design and ethical reasoning across many technologies. An AI governance course focuses on management systems and controls for AI; this course covers value-sensitive design, bias and privacy testing, biometrics, ledgers, immersive tools and ethics boards.

What do you bring back from Ethical Technologist training?

You bring back a completed impact assessment for a real product, including value requirements, bias and privacy test plans, transparency measures and a recommendation your ethics board can act on.

Ethical Technologist: The Way Forward

The Ethical Impact Assessment Dossier first informs whether a high-risk feature launches as designed, launches with added safeguards or returns for redesign. Product owners and risk specialists use it to brief ethics boards and partners. After its first use, revisit the stakeholder values and bias test results, since user groups, data and public expectations shift after launch.