CONCEPT

Human-Centred AI and Machine Learning UX Design Training Course



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Introduction:

Human-centred AI and machine learning UX design training is a one-week course for product, UX research and data science teams who shape machine learning features, ending with a human-centred AI feature specification and user testing plan. Many organisations ship AI features that users misread, distrust or override, because model accuracy is tested while expectations, explanations, error recovery and feedback are left undesigned. Participants already work on digital products or models, and the course is taught through case studies on interface, research and evaluation material from several sectors. CoreConcept Training Center delivers this course on designing AI around people.

Course Objectives:

- Apply ISO 9241-210 human-centred design activities and user research methods to frame AI features around evidenced user needs
- Shape user mental models and expectations through onboarding, capability statements and human-AI interaction guidelines
- Design explanation and confidence displays that let users judge when to rely on a model output
- Specify human-in-the-loop review, override and feedback flows, including conversational and generative AI interaction patterns
- Plan error recovery, inclusive usability testing and trust calibration checks for AI features before release
- Define AI feature success metrics and produce a human-centred AI feature specification with a user testing plan

Target Audience:

- Professionals responsible for product requirements and roadmaps of AI-enabled features
- Professionals responsible for user research, interaction design and usability testing of digital services
- Professionals responsible for building, evaluating and tuning machine learning models used in products
- Professionals responsible for conversational assistants, chat channels and generative AI features
- Professionals responsible for analytics and success measurement of digital product releases

Course Outline:

Day 1: Human-Centred AI Foundations and AI Feature Baseline

- ISO 9241-210 Human-Centred Design Activities Applied to AI Features
- Augmentation Versus Automation Decision Framework for Product Tasks
- AI Feature Inventory Mapping Users, Decisions and Model Outputs
- Contextual Inquiry and Diary Studies for AI Use Cases
- User Needs Statement and AI Suitability Assessment Canvas

Day 2: Interaction Guidelines, Mental Models and Explainability Patterns

- Human-AI Interaction Guidelines Grouped by Interaction Phase
- Mental Model Elicitation Through Card Sorting and Think-Aloud
- Onboarding Patterns Setting Capability Limits and Expectations
- Explanation Interface Patterns Covering Feature Attribution and Examples
- Confidence Display Options Using Scores, Bands and Categories

Day 3: Control, Feedback and Conversational AI Design Practice

- Human-in-the-Loop Review Queues and Override Control Design
- Implicit and Explicit Feedback Capture for Model Improvement
- Data Consent Prompts and User-Facing Data Use Notices
- Conversational AI Turn Design, Repair Prompts and Handover
- Generative AI Output Editing, Citation and Regeneration Patterns

Day 4: Errors, Fairness and Trust Calibration Problem Cases

- Error Taxonomy Separating False Positives, Misses and Context Failures
- Graceful Failure Flows and Fallback Paths for Low Confidence
- Inclusive Usability Testing with Diverse Participant Recruitment Plans
- Trust Calibration Diagnostics for Overreliance and Algorithm Aversion
- AI Feature Success Metrics Combining Task, Trust and Adoption Signals

Day 5: Case Study: Human-Centred AI Feature Specification and Testing Plan

- Case Product Brief Analysis for a Recommendation or Triage Feature
- Case Mental Model Map and Onboarding Flow Draft
- Case Explanation, Confidence and Override Interaction Specification
- Case Moderated Usability Test Script and Success Criteria
- Human-Centred AI Feature Specification and User Testing Plan Completion

Skills You Will Gain:

- Human-Centred AI Requirements
- AI User Research
- Mental Model Mapping
- Explanation Interface Design
- Override and Feedback Flow Design
- Conversational AI Interaction Design
- Inclusive Usability Testing
- Trust Calibration Analysis

Why Attend This Course:

- Deliver a human-centred AI feature specification and user testing plan to the product owner and design lead for release planning
- Choose where a feature should automate, suggest or defer to a person, using documented user evidence
- Avoid rework, complaints and abandoned features caused by unexplained outputs, missing overrides and untested edge users
- Brief engineers, analysts and service colleagues on shared patterns for explanations, confidence displays and feedback

Conclusion:

Back at work, the participant gives the product owner, design lead and data science lead a human-centred AI feature specification and user testing plan they can use to decide how an AI feature is introduced, explained, corrected and measured before release. Engineering and research teams then build and test against the same interaction rules and success criteria. After the first round of user testing, the unit should review whether users understood the feature's limits, how often they overrode or corrected outputs, and whether trust levels matched actual model performance.

Frequently Asked Questions FAQ:

What should participants know before human-centred AI and machine learning UX design training?

Participants should already contribute to digital products, user research or model development and understand basic machine learning ideas such as training data, predictions and accuracy. No coding is needed; bringing an AI feature from their own organisation helps them apply the case work.

How does human-centred AI and machine learning UX design differ from AI risk assurance or general UX courses?

It concentrates on how users experience, understand, correct and trust AI features. AI risk assurance courses focus on model validation and governance evidence, and general UX courses rarely address probabilistic outputs, so both appear only where they inform interface and research decisions.

Why does human-centred AI design aim for calibrated trust rather than maximum trust?

Users should rely on an AI feature only as much as its performance warrants. Overtrust leads people to accept wrong outputs and distrust leads them to ignore useful ones, so explanations, confidence displays and override controls keep reliance matched to actual model behaviour.

What do participants take back from human-centred AI and machine learning UX design training?

Participants take back a human-centred AI feature specification and user testing plan for a case product, covering user needs, mental models, explanation and confidence displays, override and feedback flows, error handling and success metrics, ready to adapt to an AI feature in their own organisation.