Production designer

AI overview

AI is beginning to transform the role of production designers by enhancing workflows, supporting creativity, and optimising planning processes. AI-driven tools could assist with digital simulations, set visualisation, and material selection, allowing designers to bring ideas to life quickly. Additionally, AI can analyse data to evaluate trends, budget constraints, and location logistics, providing insights that align creative and logistical needs.

To prepare for the future, production designers could familiarise themselves with AI tools for 3D modelling, visualisation, and data analysis. Learning to use AI for archiving and automating tasks could also be essential, enabling designers to maximise productivity and maintain control over artistic choices.

What AI tools can I use right now? – Efficiency & workflow opportunities

Pre-production

Automated 3D modelling and set visualisation: AI tools could generate 3D models from initial sketches or descriptions, allowing rapid prototyping of set designs.

Self-hosted AI models for privacy: Production designers could run AI models locally, ensuring confidentiality and customising models based on their past work.

Sketch to CAD conversion: AI tools could convert hand-drawn sketches into 2D and 3D CAD files, improving the speed of the design process.

Production

Material and colour selection: AI could suggest materials, textures, and colour palettes, ensuring consistency with the project's visual theme.

Lighting and environment simulation: AI tools could simulate different lighting setups, helping designers adjust the visual quality of sets before filming.

Design visualisation: AI could help integrate the set design with the environment, ensuring realistic representations of designs before they are built.

Post production

Cost and resource analysis: AI-powered tools could help track design expenses and allocate resources more effectively during post-production.

Design impact and audience analysis: AI could provide insights into how design elements impact audience perception, enhancing the storytelling.

Compliance and budgeting reports: AI tools could generate financial and compliance reports, helping ensure the production stays within budget and meets regulatory requirements.

How can I prepare for the future?

As technologies develop, keeping up-to-date with the latest opportunities is important.

These are some of the areas that production designers may need to understand in the future.

Future Tech	Description	Learning resources
AI-Enhanced 3D Modelling	AI tools that create 3D models from basic sketches or descriptions, accelerating the concept design process.	Check out ScreenSkills Training, events and opportunities page for up to date courses on 3D modelling; additional resources on LinkedIn Learning and Coursera for AI-assisted design tools.
Self-Hosted AI for Confidentiality and Custom Models	Local AI models that enable production designers to process sensitive data without external storage, preserving confidentiality.	Tutorials on GitHub for setting up local AI models; YouTube guides on self-hosting and data protection.
Material and Colour Palette Generators	AI systems that suggest colour schemes, textures, and materials based on the theme, era, or tone of the project.	Colour theory and design courses on ScreenSkills; online resources from Skillshare and Udemy on AI in design.
Lighting Simulation Tools	AI tools that simulate lighting effects on sets, enabling designers to pre-emptively adjust designs for optimal visual quality.	ScreenSkills training on lighting in design; LinkedIn Learning provides resources on lighting simulation for film.
AI Budget and Resource Analysis	AI that tracks design costs and resource allocation, helping designers manage budgets effectively.	Check out ScreenSkills Training, events and opportunities page for up to date courses on production budgeting; Coursera and Skillshare offer courses on AI for cost analysis.