SkillNewton

Live Online | 30 Days | Course Brochure

AI SEO & SEO Automation

Combine AI, Python and SEO tools to build faster, repeatable SEO workflows, from AI-assisted keyword research to automated audits and reporting.

DURATION **30 Days**	MODE **Live online, instructor-led**	LEVEL **Beginner to Intermediate**
FEE **₹6,000**	MODULES **12 modules**	PROJECTS **12 practical + capstone**

Learning approach: Live Classes + Practical Assignments + AI & Automation Implementation

Course overview

Learn how to combine Artificial Intelligence, SEO tools, automation workflows and programming to make SEO processes faster, smarter and more scalable. This practical training programme focuses on AI-assisted keyword research, automated content workflows, Python for SEO, API integrations, bulk metadata generation, automated website analysis, SEO reporting and AI-powered technical SEO auditing.

You will learn how to build repeatable SEO workflows, automate time-consuming tasks, integrate SEO tools with AI platforms and develop practical automation solutions for websites, blogs and digital marketing agencies. Throughout, the course stresses human oversight, fact verification and review of AI output before anything goes live on a website.

The programme runs for 30 days across six learning phases and 12 modules, moving from AI in SEO and keyword research, through Python, website crawling, APIs and bulk metadata, to auditing, reporting and advanced workflows. You complete 12 practical projects and assignments, ending with a capstone in which you build a practical AI-powered SEO automation system. Live classes run 5 days a week, 1.5 hours each, with practical coding exercises after major modules, weekly doubt-clearing sessions, hands-on AI API integration, real website automation exercises and a final capstone evaluation.

What you will be able to do

- Use AI tools for keyword research and content planning
- Develop AI-assisted content workflows
- Perform automated keyword clustering
- Write basic Python scripts for SEO
- Extract and process website data
- Automate website crawling and SEO checks
- Work with REST APIs and AI integrations
- Generate SEO metadata in bulk
- Build basic AI-powered technical SEO audit tools
- Automate SEO reporting workflows
- Develop repeatable SEO processes for agencies and businesses
- Build practical AI-powered SEO automation projects

Who should enrol

- **SEO professionals**: Add AI and automation to your work: clustering, bulk metadata and automated audits.
- **Digital marketing executives**: Use AI for keyword research and content planning, and automate SEO reporting tasks.
- **Freelance SEO consultants**: Build Python crawlers, audit tools and reporting workflows you can reuse across clients.
- **SEO agency professionals**: Develop repeatable, multi-step agency SEO processes with validation and quality checks.
- **Content strategists and SEO writers**: Use AI for topic research, topical maps and content briefs, with editorial review.
- **Website owners and bloggers**: Crawl your own site, find broken links and missing metadata, and generate fixes in bulk.
- **WordPress developers**: Apply Python, APIs and crawling scripts to automate SEO checks on the sites you build.
- **Python beginners**: Learn Python fundamentals through SEO tasks, from CSV files to requests and BeautifulSoup.
- **Digital marketing students**: Get hands-on practice with AI tools, Python and SEO automation via practical projects.

Curriculum: 12 modules

Days 1–5 · AI in SEO & Research

Module 1: Introduction to AI in SEO

Understanding Artificial Intelligence in SEO · Evolution of AI-powered search and SEO · AI applications in keyword research · AI-assisted content optimization · AI-powered competitor analysis · AI applications in technical SEO · Understanding LLMs and generative AI · Introduction to ChatGPT, Gemini and Perplexity · AI limitations and common mistakes · Human oversight and SEO quality control · Developing AI-powered SEO workflows

Module 2: AI-Assisted Keyword Research & Analysis

Understanding AI-assisted keyword research · Generating keyword ideas using AI · Search intent classification using AI · Long-tail keyword discovery · Supporting and semantic keyword research · Keyword clustering and grouping · Competitor keyword research workflows · Topic and subtopic discovery · Search query expansion · Building keyword research databases · Automated keyword categorization · Keyword mapping and content planning

Module 3: AI-Powered Content Research & Strategy

AI-assisted topic research · Competitor content analysis · Content gap identification · Topical map development using AI · Semantic keyword and entity research · Content brief generation · SEO content outline generation · Search intent-based content planning · Supporting terminology identification · Content research automation · Content quality and fact verification · Developing editorial workflows

Days 6–10 · AI Content & Python

Module 4: AI Content Creation & Optimization Workflows

Introduction to AI-assisted content creation · Building effective SEO prompts · Prompt engineering fundamentals · Generating SEO content briefs · AI-assisted article drafting · Creating structured content outlines · Title and meta description generation · Heading optimization · Semantic content optimization · FAQ and question-based content generation · Content rewriting and updating · Bulk content optimization workflows · Fact-checking and editorial review · Avoiding generic and repetitive AI content

Module 5: Python Fundamentals for SEO Automation

Introduction to Python for SEO · Setting up Python and development environments · Variables, data types and operators · Lists, dictionaries and loops · Conditional statements · Functions and reusable scripts · Reading and writing CSV and Excel files · Working with JSON data · File handling and data processing · Installing and using Python libraries · Introduction to requests and BeautifulSoup · Building simple SEO automation scripts

Days 11–15 · Crawling Automation

Module 6: Website Crawling & SEO Automation Using Python

Introduction to automated website crawling · Understanding HTTP requests · Fetching website URLs · Extracting page titles and meta descriptions · Extracting headings and image alt attributes · Checking HTTP response codes · Identifying broken links · Detecting missing metadata · Extracting internal and external links · Sitemap URL extraction · Robots.txt analysis · Basic canonical tag analysis · Exporting crawl results to CSV and Excel · Building a basic website SEO audit script

Days 16–20 · APIs & Bulk Metadata

Module 7: SEO APIs & AI Integration

Introduction to APIs · Understanding API requests and responses · REST API fundamentals · HTTP methods and status codes · JSON data handling · API authentication and API keys · Understanding API rate limits · Introduction to Google APIs · Google Search Console API fundamentals · Integrating AI APIs into SEO workflows · Connecting Python scripts with AI models · Sending prompts and processing AI responses · API error handling · Managing API costs and usage · Building simple AI-powered SEO applications

Module 8: Bulk SEO Automation & Metadata Generation

Understanding bulk SEO operations · Extracting website page information · Bulk title tag generation · Bulk meta description generation · Automated heading suggestions · Bulk image alt text generation · Keyword-based metadata optimization · AI-assisted content recommendations · Processing large URL lists · Spreadsheet-based SEO automation · Validating generated metadata · Exporting optimized metadata · Human review before website implementation

Days 21–24 · AI Audits & Reporting

Module 9: AI-Powered Technical SEO Auditing

Automated technical SEO checks · Website crawling with Python · Identifying missing title tags · Detecting duplicate metadata · Finding broken internal links · Identifying missing image alt attributes · Checking canonical tags · XML sitemap validation · Robots.txt analysis · HTTP status code monitoring · Basic schema detection and validation · AI-assisted technical issue classification · Generating SEO audit recommendations · Building automated SEO audit reports

Module 10: SEO Reporting & Workflow Automation

Introduction to SEO reporting automation · Google Search Console data extraction · Google Analytics 4 reporting fundamentals · Working with SEO datasets · Automated keyword performance reports · Automated traffic reports · Data cleaning and formatting · Google Sheets automation · Python-based report generation · Looker Studio dashboard fundamentals · Automated reporting workflows · Scheduling and maintaining scripts · Building reusable reporting templates

Days 25–30 · Workflows & Final Project

Module 11: Advanced AI SEO Workflows

AI-assisted competitor analysis · Automated content gap analysis · AI-powered keyword clustering · Automated topical map generation · Internal linking opportunity identification · AI-assisted content auditing · Automated content briefs · SEO task prioritization · AI-assisted SERP analysis · Building multi-step SEO workflows · Workflow validation and quality assurance · Developing repeatable agency SEO processes

Module 12: Practical Implementation & Final Project

Develop a practical AI-powered SEO automation system

Build an AI-assisted keyword research workflow · Develop an automated keyword clustering script · Create an AI-powered content brief generator · Build a Python website crawler · Extract website SEO metadata in bulk · Generate optimized metadata using AI · Create a basic technical SEO audit tool · Integrate an AI API with Python · Extract and analyze SEO performance data · Develop an automated SEO reporting workflow · Create a final AI SEO automation project

- Identifying repetitive SEO tasks
- Designing an automated SEO workflow
- Developing keyword research and clustering automation
- Integrating an AI API
- Creating a Python-based website crawler
- Extracting website metadata in bulk
- Generating AI-assisted SEO recommendations
- Building a basic technical SEO audit system
- Processing SEO performance data
- Generating an automated SEO report

Practical projects

1. **AI-Assisted Keyword Research Workflow**
2. **Automated Keyword Clustering Script**
3. **AI-Powered Topical Map Generator**
4. **SEO Content Brief Generator**
5. **Python-Based Website Crawler**
6. **Bulk Metadata Extraction Tool**
7. **AI-Powered Bulk Meta Description Generator**
8. **Automated Broken Link Checker**
9. **Basic Technical SEO Audit Tool**
10. **Google Search Console Data Extraction**
11. **Automated SEO Reporting Workflow**
12. **AI SEO Automation Capstone Project**
13. **Final capstone project**: Develop a practical AI-powered SEO automation system.

Tools & platforms covered

AI Assistants	ChatGPT, Gemini, Perplexity
AI APIs	OpenAI API, Gemini API
Programming	Python
Web Scraping	Requests, BeautifulSoup

Data Processing	Pandas, OpenPyXL
SEO Research	Ahrefs, Semrush
Search Analytics	Google Search Console
Analytics	Google Analytics 4
Website Crawling	Screaming Frog
Automation	Python Scripts, Google Sheets
Reporting	Looker Studio
Content Management	WordPress
Development	VS Code, Google Colab

How the course is delivered

- Live instructor-led online classes
- Hands-on AI tool training
- Practical Python programming exercises
- AI API integration demonstrations
- Real-world SEO automation assignments
- Weekly doubt-clearing sessions
- Practical tool and workflow development
- Final capstone project
- Course completion certificate

Before you join

- The course runs from beginner to intermediate level: a basic understanding of SEO helps, and no prior coding is required, as Python is taught from fundamentals in Module 5.
- A computer and stable internet connection for live classes, able to run Python and VS Code, or use Google Colab in the browser.
- A Google account for tools such as Google Colab, Google Sheets, Google Search Console, Google Analytics 4 and Looker Studio.

Frequently asked questions

What is the AI SEO & SEO Automation course?

It is a 30-day live online programme of 12 modules that teaches you to combine AI, Python, APIs and SEO tools to automate SEO work. It includes 12 practical projects and assignments and ends with a capstone in which you build a practical AI-powered SEO automation system.

What is the fee and how long does it run?

The course fee is ₹6,000 and the programme runs for 30 days. Send an enquiry for the next batch start date.

Do I need coding experience?

No. The course is pitched at beginner to intermediate level, and Python is taught from fundamentals in Module 5, covering variables, loops, functions, CSV and Excel files, JSON and libraries such as requests and BeautifulSoup.

Are the classes live?

Yes. Classes are live, instructor-led and online, 5 days a week, 1.5 hours each, with practical coding exercises after major modules and weekly doubt-clearing sessions.

Will I learn to build a website crawler?

Yes. Module 6 covers crawling with Python: fetching URLs, extracting titles, meta descriptions, headings and alt attributes, checking response codes, finding broken links and exporting results to CSV and Excel.

Does the course cover AI APIs?

Yes. Module 7 covers REST APIs, authentication and API keys, rate limits, Google Search Console API fundamentals, connecting Python scripts with AI models, error handling and managing API costs.

Which tools will I use?

ChatGPT, Gemini, Perplexity, the OpenAI API, Gemini API, Python, Requests, BeautifulSoup, Pandas, OpenPyXL, Ahrefs, Semrush, Google Search Console, Google Analytics 4, Screaming Frog, Google Sheets, Looker Studio, WordPress, VS Code and Google Colab.

Will I get a certificate?

Yes. You receive a course completion certificate.

> **Please note:** This course teaches methods and workflows; rankings, traffic and other results are not guaranteed. Using AI tools and APIs may carry third-party costs, and all AI-generated output needs human review before use.

Enrol or ask a question

Course page	skillnewton.com/courses/ai-seo-automation-course/
Email	hello@skillnewton.com
Phone	+918920565218
WhatsApp	+918920565218
Website	skillnewton.com
Head office	Office No. 8, 3rd Floor, Amartex Plaza, Behind Badkal Mor Metro Station, Sector 19, Faridabad, Haryana 121002, India

Send an enquiry from the course page for the next batch start date and how to enrol.