

Data Analyst Level 4 Apprenticeship.

Programme guide



In partnership with



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Data is a currency you can't afford to waste.

Businesses have more data available to them than ever before, and new ways of using that data are being discovered every day. As the value of data continues to be realised, demand for the technical skills needed to turn actionable insight into revenue is skyrocketing.

The UK's data skills challenge

Companies have lots of data but limited insights

70% of organisations claim they're receiving data faster than they can analyse it

Demand for data skills is soaring

Job postings requiring data skills have increased 158% since 2013

Data professionals are high in demand

53% of senior executives have identified data and analytics as their top investment priority in the next two years

Recruiting the right candidates is highly competitive

42% of employers are finding it difficult to attract candidates with the technical skills they need



We're your strategic talent partner.

Workforce planning is more complex, more uncertain, and more crucial than ever before. Critical skills shortages mean simply recruiting talent is no longer sustainable.

BPP understands these challenges, which is why we are more than just a training provider. We're your strategic talent partner.

Developing the skills you need

BPP is a leading apprenticeship training provider offering over 45 apprenticeship standards across the critical skills gaps facing employers today.

Future planning

We help you to workforce plan, creating talent pipelines that bring stability and certainty for the future.

Courses for every level

Our apprenticeships range from entry level 2 to specialist master's level 7, ensuring you have the right talent and skill sets in the right place, at any level.

A holistic approach

Whether your business needs to upskill, reskill, succession plan, or find ways to improve retainment of existing talent, we work with you to find the right balance.

Trusted by experts, to be the experts

BPP is the trusted education partner for leading organisations across a range of industries.

We're experts in data.

Keeping pace with the rapid rate of technological change can be a challenge. The constantly evolving skills landscape means your organisation may find itself having to understand the current skills and proficiencies in your business while simultaneously trying to anticipate those you will need in the future. This is where the BPP Education Group can help.

We listen, advise and guide

Different areas of your business use data and data analysis in different ways. That's why we've developed apprenticeships that are specific to business functions and roles.

We teach how to solve problems

Our applied data training is developed by experienced data scientists from across industries and based on real-world business case-studies. We don't just teach to learn, we teach so apprentices can make an impact in your organisation.

We deliver commercial training

With data apprenticeships designed and delivered by industry experts, our programme content reflects the relevant and practical application of data in business, rather than just theoretical academic knowledge.

We focus on content quality

We bolster our data training with dedicated masterclasses and short courses designed to offer greater depth in specialist areas associated with data – whether that's specific tools such as Tableau and Google Analytics, or better storytelling to influence stakeholders.



Level 4 Data Analyst Apprenticeship.

Our Level 4 Data Analyst Apprenticeship helps build expert analytical skills in your data teams that generate deeper insights for competitive advantage.

The programme is designed for people in data roles, or looking to move into a data role, who want to:

- analyse data to find actionable insights that drive business growth
- develop knowledge in data structures, database systems and procedures for data analytics
- use various tools that enable different types of analysis
- predict and review trends for commercial advantage
- inform key stakeholders with insights that support better decision-making
- clearly present analysis back to the business in a language everyone can understand
- progress towards more advanced methods in data science and big data analytics

How will it benefit your business?

- Gain competitive advantage by harnessing actionable insights on your customer and market data
- Optimise business performance by uncovering areas for improvement
- Build robust strategies for business growth through fact-based decision-making
- Respond quicker to trends that impact your business and mitigate risk
- Improve business efficiency through quicker and more accessible data-driven insights
- Accelerate adoption of new technology through a data-driven culture



Duration

21 months
(18 months learning plus three months End Point Assessment)



Qualification achieved

Level 4 Data Analyst Apprenticeship



Programme delivery

All teaching, coaching and workplace development is delivered online, providing ultimate flexibility and efficiency for your business



Typical study time required

Two hours of lectures per week, plus time off the job to apply learning and put newly developed skills into practice



Start dates

January, May, August and October



Assessment

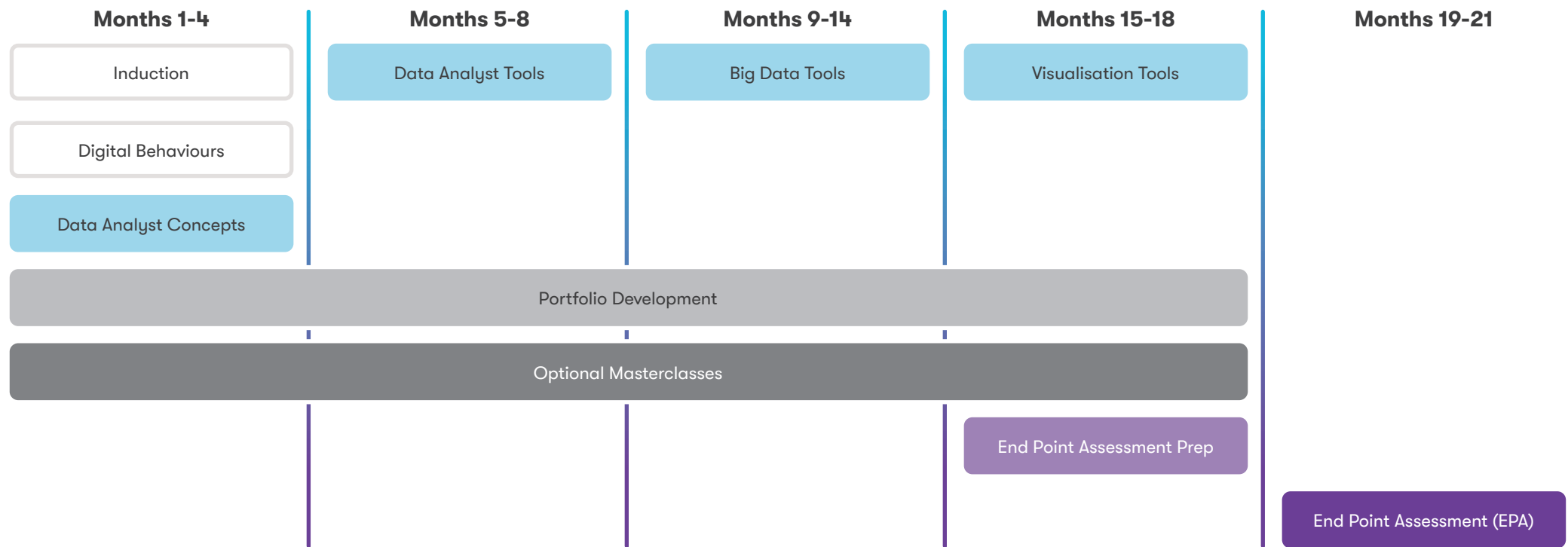
Apprentices are assessed against a standard set of competencies that are developed throughout the programme. End Point Assessment (EPA) includes a project with presentation and questioning, and a professional discussion underpinned by a portfolio.



Cost

This programme costs £15,000, which is covered in full through the Apprenticeship Levy. Employers who don't pay into the levy will only pay 5% of the full price, with the remaining 95% paid for by the Government.

Data Analyst learner journey.



We also offer additional masterclasses, that run fortnightly. These masterclasses are designed to offer greater depth in specialist areas, so that apprentices can tailor the programme to suit their own needs.

Career development

Career development paths in Data
Influencing senior leaders through
Data storytelling
Data in finance

Alternative tools

Tableau
Alteryx
SQL basics
Google Analytics

Data-related topics

AI and ChatGPT
Finding and analysing market trends
Sentiment analysis

Entry requirements and eligibility.

Entry requirements

These are set by individual employers, but must include:

- Over the age of 16 years
- Not in full-time education
- Working at least 30 hours per week but no more than 40 hours per week
- Spending at least 50% of their working hours in England over the duration of their apprenticeship
- GCSEs grade A – C in Maths and English (9 – 4 on the new grading system) or equivalent
- Applicants must be employed in a relevant role

Eligibility

To be eligible for the Level 4 Data Analyst, the following activities must form part of the learner's responsibilities within their role.

Job role checklist

- ✓ Identify data sources to meet the organisation's requirement, using evidence-based decision-making to establish a rationale for inclusion and exclusion of various data sets and models
- ✓ Liaise with the client and colleagues from other areas of the organisation to establish reporting needs and deliver insightful and accurate information
- ✓ Collect, compile and, if needed, cleanse data, solving any problems that arise, to or from a range of internal and external systems
- ✓ Produce performance dashboards and reports in the Visualisation and Model Building phase
- ✓ Support the organisation by maintaining and developing reports for analysis to aid with decisions, and adhering to organisational policy/legislation
- ✓ Produce a range of standard and non-standard statistical and data analysis reports in the Model Building phase
- ✓ Identify, analyse, and interpret trends or patterns in data sets
- ✓ Draw conclusions and recommend an appropriate response, offer guidance or interpretation to aid understanding of the data
- ✓ Summarise and present the results of data analysis to a range of stakeholders, making recommendations
- ✓ Provide regular reports and analysis to different management or leadership teams, ensuring data is used and represented ethically in line with relevant legislation (e.g. GDPR which incorporates Privacy by Design)
- ✓ Ensure data is appropriately stored and archived, in line with relevant legislation e.g. GDPR
- ✓ Practise continuous self-learning to keep up to date with technological developments to enhance relevant skills and take responsibility for own professional development



Programme modules.

All learners undertake the following technical modules:

Months 1-4

Data Analyst Concepts

This module introduces the fundamental principles for effective data analysis including the data lifecycle, different types of data, database design, data modelling, and key considerations such as data quality and compliance:

- Requirements of data analysis
- Data analysis tasks
- Structured and unstructured data
- Data architecture
- Database design, implementation and maintenance

Expected impact:
Understand and apply the requirements and routine steps of data analysis using different types of data throughout the data life cycle

Months 5-8

Data Analyst Tools

Key data techniques using Excel, Power Query, Power BI and SQL. This module focuses on how to use industry standard tools and methods for data analysis:

- Sourcing, blending and joining data
- Data modelling
- Data cleansing
- Manipulating data

Expected impact:
Understand and apply data analysis methods to gain new insights into your data

Months 9-14

Big Data Tools

Learn how to use Python, and more advanced statistical data analysis and predictive analytics using Python, Excel and Power BI working with large volumes of data:

- Requirements gathering
- Hypothesis testing
- Exploratory data analysis
- Time series forecasting
- Linear and logistic regression
- K-Means cluster analysis
- Inferential statistics, P-Value, T-Tests, ANOVA
- Text analytics

Expected impact:
Gain more detailed insight and data analysis across internal and external data sources by mastering a variety of tools to meet the requirements of the data

Months 15-18

Visualisation Tools

Learn what makes effective dashboards and visualisations, and what to avoid if you want to get buy-in from other stakeholders in the business. This module combines advanced Power BI and Excel skills with design thinking to craft engaging visuals that drive informed decision-making in your business:

- Good visualisation design
- Dashboard development
- Developing data stories
- Data reporting

Expected impact:
Better communication of analysis and insight with all audiences, leading to clearer and more confident decision-making

EPA Preparation

Portfolio Development

Throughout the apprenticeship, learners will collate evidence from workplace activities and projects to build a portfolio. This demonstrates the Knowledge, Skills and Behaviours gained and how they have been applied effectively in the job role. The portfolio will be the basis of the professional discussion at End Point Assessment.

Our Coaches work with the apprentice and their line manager to understand the best opportunities in the workplace to showcase and evidence their new skills, while also contributing to organisational goals.

End Point Assessment.

We don't leave End Point Assessment preparation to the last minute. We prepare learners continuously throughout the apprenticeship, drawing on learning at each stage.

Project with presentation and questioning

Part 1: Data Analysis Project

Duration: Maximum 8 weeks

Learners will carry out a work-based project and write a report (maximum 3,500 words) to be submitted before the assessment day.

Part 2: Presentation with questioning

Duration: 40 minutes

Learners will prepare and deliver a presentation on the project, followed by questioning. The presentation is submitted alongside the report before the assessment day.

Professional discussion underpinned by a portfolio

Duration: 60 minutes

The apprentice will discuss their portfolio of evidence to demonstrate how they have met the required Knowledge, Skills and Behaviours (see page 08).

Learners are supported by their Coach during the programme to help them prepare for this part of EPA.

Learning outcomes.

Apprentices that successfully complete the Level 4 Data Analyst Apprenticeship will be able to demonstrate and practically apply the following Knowledge, Skills and Behaviours within the workplace.

Knowledge

- K1:** Current relevant legislation and its application to the safe use of data
- K2:** Organisational data and information security standards, policies and procedures relevant to data management activities
- K3:** Principles of the data life cycle and the steps involved in carrying out routine data analysis tasks
- K4:** Principles of data, including open and public data, administrative data, and research data
- K5:** The differences between structured and unstructured data
- K6:** The fundamentals of data structures, database system design, implementation and maintenance
- K7:** Principles of user experience and domain context for data analytics
- K8:** Quality risks inherent in data and how to mitigate or resolve these
- K9:** Principal approaches to defining customer requirements for data analysis
- K10:** Approaches to combining data from different sources
- K11:** Approaches to organisational tools and methods for data analysis
- K12:** Organisational data architecture
- K13:** Principles of statistics for analysing data sets

K14: The principles of descriptive, predictive and prescriptive analytics

K15: The ethical aspects associated with the use and collation of data

Skills

- S1:** Use data systems securely to meet requirements and in line with organisational procedures and legislation including principles of Privacy by Design
- S2:** Implement the stages of the data analysis life cycle
- S3:** Apply principles of data classification within data analysis activity
- S4:** Analyse data sets taking account of different data structures and database designs
- S5:** Assess the impact on user experience and domain context on data analysis activity
- S6:** Identify and escalate quality risks in data analysis with suggested mitigation or resolutions as appropriate
- S7:** Undertake customer requirements analysis and implement findings in data analytics planning and outputs
- S8:** Identify data sources and the risks and challenges to combination within data analysis activity

S9: Apply organisational architecture requirements to data analysis activities

S10: Apply statistical methodologies to data analysis tasks

S11: Apply predictive analytics in the collation and use of data

S12: Collaborate and communicate with a range of internal and external stakeholders using appropriate styles and behaviours to suit the audience

S13: Use a range of analytical techniques such as data mining, time series forecasting and modelling techniques to identify and predict trends and patterns in data

S14: Collate and interpret qualitative and quantitative data and convert into infographics, reports, tables, dashboards and graphs

S15: Select and apply the most appropriate data tools to achieve the optimum outcome

Behaviours

- B1:** Maintain a productive, professional and secure working environment
- B2:** Show initiative, being resourceful when faced with a problem and taking responsibility for solving problems within their own remit
- B3:** Work independently and collaboratively
- B4:** Be logical and analytical
- B5:** Identify issues quickly, investigating and solving complex problems and applying appropriate solutions. Ensure the true root cause of any problem is found and a solution is identified which prevents recurrence
- B6:** Be resilient and view obstacles as challenges and learning from failure
- B7:** Be adaptable to changing contexts within the scope of a project, direction of the organisation or data analyst role

The BPP learning experience.

Business simulations and applied learning

We use professionally relevant case studies and custom-built platforms which replicate those used in practice, meaning your employees benefit from an interactive, high impact learning experience.

Market leading delivery

Online Classroom Live is our premium study experience, where students undertake their training, as well as accessing online events and masterclasses. It uses Adobe Connect's market-leading software to deliver interactive features that replicate a real-life environment for flexible, connected learning.

Everything at the click of a button

Our virtual learning environment, The Hub, offers 24/7 access to resources including timetables, key dates and learning materials, as well as providing updates and announcements. It is also where apprentices can access additional learning resources, including LinkedIn Learning and Pluralsight, to help them:

- extend beyond the core syllabus
- branch out into multiple different disciplines and topic areas
- develop practical skills they can link back to their role
- take advantage of continuous learning and extension

A fully supportive environment

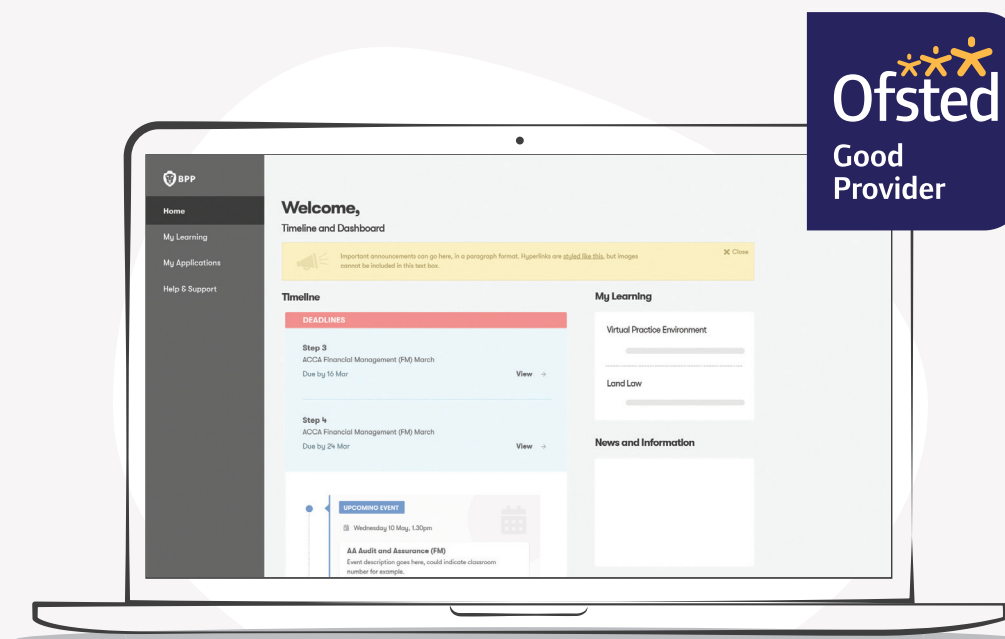
Our facilitators are specifically recruited for their industry experience and passion for training. By bringing real-life work-based examples into sessions and sharing their experiences, learners understand how the concepts covered on the course apply in business. Plus, our facilitators, Safeguarding team, and Learning Support team are always on hand to help apprentices with any queries they may have.

Subject-experienced skills Coach

We recruit our Coaches for their practical industry experience and specialist skills in the programmes they lead. During the course, apprentices attend several coaching interventions, including monthly one-to-ones and 12-weekly formal progress review meetings.

Individual learning plans

Every apprentice receives tailored support to help them stay on track and make the progress that will deliver business results. This includes personalised objectives to stretch and challenge them, and additional learning needs support if/when needed.



An innovative learning framework

All our training solutions use our innovative and unique learning framework, which focuses on career success. We support apprentices through five key stages in their training:

1. Prepare.

Develop the foundational knowledge which underpins the course

2. Apply.

Learn how the knowledge is relevant to real-life tasks

3. Collaborate.

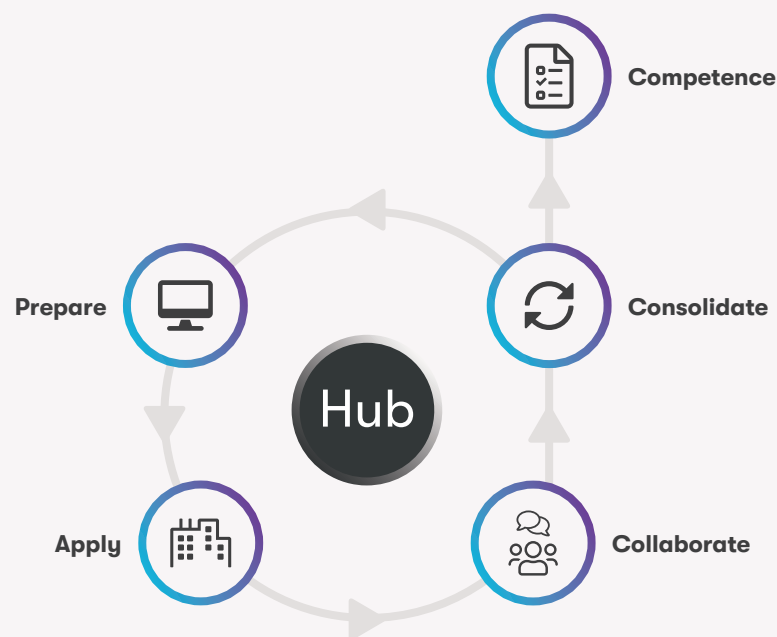
Shape and refine understanding through discussion, testing, and carrying out practical and realistic tasks

4. Consolidate.

Practise and complete tasks and activities to embed new knowledge in the long-term memory

5. Competence.

Complete the post-course competence tasks to finish the programme



A unique approach to delivering apprenticeship programmes

We ensure your employees develop practical skills, so your apprenticeships have impact from day one. By using AI-driven digital platforms, we create personalised learning paths that help learners progress through their studies. As our programmes are entirely online, learners can study at their own pace in bite-sized modules and avoid having to take time out of the office for face-to-face time in the classroom.

Supporting learners and line managers.

Learner support

- Tutor: helps with syllabus queries, technical subject questions, day-to-day contact and support, as well as leading a weekly webinar to help apprentices understand technical concepts and the work-based application of technical skills
- Trained Coach (Subject Matter Expert): conducts progress reviews, provides activity feedback. Specially trained to help students grow in confidence and address course-related stress
- The Hub: 24/7 online access to programme details, professional qualification resources, skills and behaviours resources as well as the place to submit course activities for marking and a forum to ask tutor questions

Line manager support

- Webinar: introductory session giving an overview of the programme
- Reporting: get updates on progress, receive minutes from progress reviews, and liaise with our dedicated Apprenticeship team

Recruit or upskill: the choice is yours.

Apprenticeships are a great way to recruit new talent into your business, but did you know they can also be used to train and upskill existing staff?

However your organisation uses apprenticeships, the potential benefits are clear:

- Grow your workforce cost-effectively
- Strengthen skills and capability across your teams
- Harness new and innovative ideas from fresh eyes
- Build your talent pipeline and future proof your business

Free recruitment service

If you're considering recruiting a new apprentice into your business, our free recruitment service helps find the right person in just a few easy steps:

1. We take time to understand your requirements, whether that's existing skills, experience or simply a great attitude
2. We advertise your role and gather CVs
3. We carry out first-round telephone interviews to create an initial shortlist of candidates

4. We record and share second-round video interviews with shortlisted candidates so you can get a feel for them and choose who you want to interview
5. We offer free Manager Awareness sessions to line managers, talking through what to expect and sharing useful tips on getting the most out of the apprenticeship experience

If you're thinking of recruiting a number of apprentices, or have an apprenticeship scheme already in your business, we can organise assessment centre days and work with you to build the right selection process for your needs.



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If you have any questions, or require
any more information visit **bpp.com**,
or call **03300 603 100**.

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