



Invitation to Tender Specification

**Tender for the provision of a development  
programme in Project Data Analytics for the  
Engineering Construction Industry (Ref: SF01-21)**

The Engineering Construction Industry Training Board (ECITB) is pleased to invite you to tender for the above. Full details are included in these documents, which describe the services which are required, the basis of tendering and the processes to be followed in the submission of tender offers.

## 1. Background

Project Data analytics (PDA) is the process of examining project data sets in order to find trends and draw conclusions about the information they contain. Data analytics technologies and techniques are increasingly used in Engineering Construction industries to enable organizations to make more-informed business and project decisions.

ECITB is seeking to pilot a development programme to develop Project Data Analytics knowledge and skills for a group of delegates from the ECI. The course materials and delivery will be supplied by the successful bidder.

## 2. Definitions

In this specification the following terms shall have the following meanings:

**“Development Programme”** means a programme to provide learning and practice in the use of PDA tools and techniques as relevant to ECI projects. Depending on delegate availability the course should run on a part-time basis over 4-6 months, and should include:

- Classroom/Virtual classroom learning led by industry experts to cover project data analytics training and practical exercises.
- A number of individual and group projects working with employers to develop tools and capabilities for industry to solve real industry problems through effective data analysis.
- At least 1 x 3-day community event where small groups work together to solve industry problems.

Additional information on the requirements for the Development Programme is included as Appendix 1.

**“ECI”** means the Engineering Construction Industry as summarised here:

<https://www.ecitb.org.uk/about-us/>

**“PDA”** means Project Data Analytics, the application of data analytics in an ECI project-driven environment.

Projects are carried out in accordance with a contract and may vary from an initial design concept study to a full design, procure, construct and maintain project. There are many and varied sources of data on ECI projects including contract, engineering and procurement, site construction, operation and safety data. Much of this data is managed in the ECI by the Project Management and/or Project Controls departments.

**“APM BoK”** means the Body of Knowledge which is maintained and published by the Association of Project Management, available to their members from their website.

### **3. Scope**

The scope is to cover the delivery of a PDA Development Programme in 2021, which might be either face to face or virtual classroom, depending on the circumstances at the time.

### **4. The Services**

The Contractor will:

4.1 Supply and deliver the Development Programme including all necessary materials, software and content for delivery to between 15 and 25 delegates.

4.2 Additional information regarding delivery.

For virtual delivery please identify the platform (Zoom, Teams, Adobe etc) you will use to deliver the programme (we have found that some of our employers limit access to certain platforms).

The bidder must provide a fully costed programme of how they would deliver this development programme to meet the learning aims and objectives and content requirements set out in appendix 1 to this tender.

**Tenders should include a fixed price or a per-head price for the work listed under paragraph 4.1. Where the price is dependent on the number of delegates this should be clearly indicated**

## **5. Additional Services**

ECITB may request Additional Services (as defined in the Form of Contract) from the Contractor.

Carry out any agreed modifications to the Development Programme to make it suitable for ECI delegates.

Attend additional meetings with ECITB.

**Tenders should include Day Rates for the provision of Additional Services. Where appropriate identify different rates, e.g. rates for attending meetings, development of additional materials, or Support activities.**

## **6. Expenses**

Any expenses incurred by the Contractor in the performance of the contract, such as hotel costs and air/rail travel, will only be reimbursed by ECITB if:

- they are reasonable
- they are agreed in advance with the Project Manager
- claims for such expenses are accompanied by valid receipts.

Agreed exceptional expenses must be inclusive of VAT.

It is the ECITB's policy to agree exceptional expenses on the following basis:

- Rail journeys - Standard Class
- Car mileage - Not to exceed 45p per mile, all inclusive
- Airfares - economy class
- Taxis/Hire Cars should only be used if other forms of public transport are not available. (Hire cars, if used, must not be retained unless retention is a cheaper option than any necessary use of taxis)
- Hotels - Up to 3 star.

**Agreed expenses will be reimbursed on an 'as incurred' basis and should not be included in any tender costings.**

## **Appendix 1: Further course requirements and information**

### **Learning Aims & Objectives**

The overall learning aims of the programme are to develop:

- A general understanding of project data analytics, methods, tips/tricks, underpinned by depth and proficiency in specific areas of interest.
- understanding the potential of project data analytics, how to apply it, the magnitude of the challenge and deployment roadmaps
- The knowledge and experience to become subject matter experts within the new discipline of project data analytics
- Understanding through practical experience of solving real world data driven issues and how to inspire others.
- A broad knowledge of data driven solutions and how to apply them to real life project situations.
- Understanding of the issues and realities of deploying new capabilities

### **Typical content expectations**

- Data analytics within the context of Project Management & Project Controls
- Python; Data fundamentals, methods and pipelines; Power automate; Power apps; Power BI; Azure
- Statistics and data science
- Machine learning fundamentals
- Applied machine learning & AI

Project Management terminology used in the course should be related to the APM BoK which is widely used in the ECI, to ensure its relevance in the project-driven ECI environment.