



# CERTIFICATE IN DATA JOURNALISM

## PROGRAMME OVERVIEW

Takshashila's *Certificate in Data Journalism (CDJ)* is a 3-day course helps participants become better journalists by employing analytical, interpretation and visualisation techniques that exploit the increasing wealth of data that is becoming available today.

## FACULTY

### Karthik Shashidhar

Resident Quant, The Takshashila Institution  
Data Journalist, Mint  
Freelance Management Consultant

### Pavan Srinath

Head, Strategy & Programmes, The Takshashila Institution  
Fellow, Centre for Smart City Governance

## OUTCOMES THAT MATTER

At the end of three day course, participants can expect to have developed expertise in some of the following aspects:

**“The smell test”:** How do you decide a certain number makes sense? How can you quickly call the bluff on some numbers or on numbers-based analysis? How do you design “sense-checks” such that you don’t get bulldozed by data?

**Asking the right questions:** Upon looking at numbers-based analysis, what is the kind of questions to ask? How do you extract additional information from a numbers-based story?

**Making sense of numbers/graphs:** When presented with a set of numbers and visualisations, how do you understand them, make sense of them and draw insight from them? How can you put numbers or graphs in context for your readers/viewers, and help them appreciate the numbers better?

**Towards building good visualisations:** What kind of visualisation helps best explain your data? What story are you trying to communicate with each visualisation? How can you make simple yet effective graphs using MS Excel?

**Using data to effectively tell stories.**

## COURSE STRUCTURE

The course will be delivered in-person over three working days. The course will contain interactive lecture sessions along with hands-on data analysis and visualisation exercises. All participants must bring laptops with Microsoft Office installed, and with a working broadband connection.

Participants will be given assignments to complete within the three days, and a final data story submission within one week of the conclusion of the training.

### Course Modules

#### 1. The smell test

What are the common pitfalls to avoid while analysing and building stories out of data? How do you recognize bad data or bad analysis when you see it?

#### 2. Introduction to statistics

This session deals with introductory mathematical and statistical concepts that will be useful from a journalist’s perspective.

#### 3. The problem solving process

If you have a problem that you think can be solved using data, how do you approach it? This lecture is about the scientific process by which we can solve a problem using data.

#### 4. Introduction to MS Excel

Basics of Microsoft Excel, including pivot tables.

#### 5. Political economy of numbers

In a democracy, data and numbers can be deeply political. In this lecture, we explore how numbers can be used as political statements.

#### 6. Introduction to visualisation

Comparative analysis of common visualization techniques. Introduction to good practices in visualization. Understanding what visualization technique best suits what kind of data.

#### 7. Visualisation using MS Excel

The simplest of data tools – Microsoft Excel – can be used to create beautiful and effective visualizations. This is a tool that is accessible to every journalist, so it is important for any data journalist to be able to create visualizations using MS Excel.



## 8. Bad Visualisations

This is the “smelling bullshit” equivalent for visualizations. The best looking visualizations may not tell the most effective stories. How do you decide what kind of visualizations are best for a particular purpose? How do you avoid common pitfalls in visualizations?

## 9. Telling stories using data

Capstone discussion.

## ASSESSMENT

Participants will be evaluated on both the quality of their in-class assignments, quality of their participation during the lectures and the final assessment. There will be a minimum cut-off which the participants will have to pass in order to be eligible for a certificate.

## COURSE FEES & SCHEDULE

On Request.

## WHO SHOULD TAKE IT

The course is primarily targeted at practicing journalists and editors (print and digital) who want to get a grounding in data and the practice of data journalism. Visualisation experts and graphic designers working in journalism will find value in the course.

## About Us

### Inspiration

The ancient city of Takshashila was the site of perhaps the world's oldest public policy school. It was the intellectual fountainhead not only of Indian statecraft but indeed of all fields of human endeavour. The Takshashila Institution derives inspiration from that ancient seat of learning in its contemporary objective of building the intellectual foundations of a modern India with global interests.

### Institution

The Takshashila Institution is an independent, non-partisan, non-profit organisation committed to increasing public awareness and education on strategic affairs, public policy and governance.

### Initiatives

Policy Research - covering geopolitics, national security and governance.

*Graduate Certificate in Public Policy*  
Takshashila's flagship 12 week long course has started the intake for its 10th consecutive batch. Its 200+ alumni are helping bridge India's governance gap.

*Pragati - The Indian National Interest Review*, is a monthly publication on strategic affairs, public policy and governance that gives voice to the objectives of Takshashila.

*The Indian National Interest* - one of India's best regarded independent online communities on public affairs, centred around blogs and twitter.

### Contact

For further information:

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