



Reading: Course 1 resources and citations

Module 1: Introduction to data science concepts

Resources

Google Advanced Data Analytics Certificate overview

- [largest skills gap](#)
- [15 times faster](#)

Understand your readiness score

- [Google Data Analytics Certificate](#)

Citations

Welcome to the Google Advanced Data Analytics certificate program

- Bulao, J. (2022, June 3). [How much data is created every day in 2022?](#) Techjury.
- Kozyrkov, C. (2020, April 2). [What great data analysts do — and why every organization needs them](#). Harvard Business Review.

Introduction to Course 1

- Kozyrkov, C. (2022, August 19). [What on earth is data science?](#) Medium. van der Maas, H. L. J., Snoek, L., & Stevenson, C. E. (2021, July–August). [How much intelligence is there in artificial intelligence? A 2020 update](#). Composites Science and Technology, 62(16), 2085–2086.

A brief history of data

- Gill, S. S., Kumar, A., Singh, H., Singh, M., Kaur, K., Usman, M., & Buyya, R. (2021). [Quantum computing: A taxonomy, systematic review and future directions](#). Software: Practice and Experience, 52(1), 66–114
- [History of communication](#). (n.d.). Wikiwand.com.
- [Office technology](#). (2018, June 8). Encyclopedia.com.
- Roser, M. (2015, July 14). [Internet](#). Our World in Data.
- van der Maas, H. L. J., Snoek, L., & Stevenson, C. E. (2021, July–August). [How much intelligence is there in artificial intelligence? A 2020 update](#). Composites Science and Technology, 62(16), 2085–2086.

Module 2: The impact of data today

Resources

Where data makes a difference for the future

- [internet of things](#)

Ideal qualities for data analytics professionals

- [Kaggle.com](#)

Volunteer data skills to make a positive impact

- [Children International](#)
- [Doctors Without Borders](#)
- [Care International](#)
- [Christopher's Promise](#)
- [Charity Navigator](#)
- [Christopher's Promise](#)
- [DataKind website](#)
- [Devpost.com](#)
- [Charity Navigator](#)
- [DataKind](#)
- [Devpost](#)
- [IRS.gov tax exempt organizations listing](#)
- [Statistics without borders](#)

The practices and principles of good data stewardship

- [GDPR](#)
- [LGPD](#)
- [CCPA](#)

Citations

Data-driven careers

- Kozyrkov, C. (2018, December 4). [What great data analysts do—And why every organization needs them](#). Harvard Business Review.
- Kozyrkov, C. (2021, October 3). [Which flavor of data professional are you?](#) Medium.

Leverage data analysis in nonprofits

- [5 things you need to know about nonprofits + big data](#). (2018, March 18). EveryAction.
- [DSSG Solve](#). (n.d.).
- [DataKind](#). (n.d.).
- [Charity Makeover](#). (n.d.). Charity Makeover.

Where data analytics makes an impact

- [Automotive industry: Employment, earnings, and hours](#). (2022, August 19). U. S. Bureau of Labor Statistics.
- [Media and entertainment: Video games sector](#). (n.d.) International Trade Administration.
- [Retail trade: NAICS 44-45](#). (2022, August 19). U. S. Bureau of Labor Statistics.
- [Telecommunications: NAICS 517](#). (2022, August 19). U. S. Bureau of Labor Statistics.

The future of data careers

- [LinkedIn's 2017 U.S. emerging jobs report](#). (2017, December 7). LinkedIn.

The practices and principles of good data stewardship

- (2019, February 19). [General Data Protection Regulation \(GDPR\) compliance guidelines](#). GDPR.eu.
- [Artificial Intelligence at Google: Our principles](#). (n.d.). Google AI.
- [California Consumer Privacy Act \(CCPA\)](#). (2022, March 28). State of California - Department of Justice - Office of the Attorney General.
- [General Personal Data Protection Act \(LGPD\)](#). (n.d.). Ministry of Citizenship
- [Safeguarding your data](#). (n.d.). Google Analytics Help.

Module 3: Your career as a data professional

Resources

Current and future tools

- [UC Irvine Machine Learning Repository](#)

The places you'll go...

- [project on office supply store analytics](#)
- [Jesse Mostipak's profile](#)
- [Ravin Kumar's GitHub page](#)
- [article written by Cassie Kozykov](#)
- [his YouTube video on bias in machine learning and AI, produced by Angelica Spratley](#)

Practice Quiz: Activity: Write prompts for Gemini

- [gemini.google.com](#)
- [Create a Google Account](#)

Citations

The top skills needed for a data career

- Kozyrkov, C. (2018, December 4). [What great data analysts do—And why every organization needs them](#). Harvard Business Review.

What data professionals do

- Kozyrkov, C. (2022, January 4). [What on earth is data science?](#) Medium.

Build the perfect data team

- Petersen, S., & Tekiner, F. (n.d.). [Building the data science-driven organization](#). Google Cloud Blog.
- Sorensen, C. (2022, February 17). [How to structure an analytics team](#). Iteration Insights.

- Rath, T. (2007). *StrengthsFinder 2.0*. Gallup Press.

Organize data teams with a RACI matrix, Part 1

- Daniels, B. (2019, March 12). [*The benefits of RACI charting*](#). ITS Project Management Office.
- Kantor, B. (2021, December 7). [*The RACI matrix: Your blueprint for project success*](#). CIO.

Module 4: Data applications and workflow

Resources

Best communication practices for data professionals

- [U.S. accessibility guidelines](#)
- [The World Wide Web Consortium's \(W3C\) web accessibility initiative](#)

Citations

Communication skills for data professionals

- Nicastro, D. (2018, March 21). [*5 communication skills every data scientist needs*](#). CMSWire.Com.
- Violino, B. (2021, December 7). [*Essential skills and traits of elite data scientists*](#). CIO.

Module 5: Course 1 end-of-course project

Resources

Practice Quiz: Activity: Create your Course 1 TikTok project

- [Learn about TikTok's Trust & Safety team](#)

Citations

Create your New York City TLC project

- [2017 Yellow Taxi trip data - Catalog](#). (n.d.). Data.Gov.
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