



# Advanced Financial Modeling (Investment Banking Course)

**60-hour Classroom  
Program**

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# Cians Academy

## What is Financial Modeling

Financial modeling is now one of the most indispensable skills to make a career in the fiercely competitive finance industry. It refers to the process of creating a model using MS- Excel to project the financial statements for a company

Financial modeling requires a mix of fundamental knowledge of Financial Accounting and Equity Valuation, as well as working knowledge of MS - Excel

## Applications of Financial Modeling

- **Equity Research**: Equity analysts spend a considerable amount of time building a financial model for the company they are about to give a buy/sell recommendation on
- **Investment Banking**: Investments bankers need to arrive at a valuation of a target company based on which they pitch buyers/sellers.
- **Credit Research**: Credit rating agencies like Crisil, use sophisticated financial models to evaluate credit quality of companies debt issues
- **Project Finance**: Sophisticated financial models are built in project finance, when deciding whether to do a specific capex in a project e.g. building a new hotel
- **Portfolio Investments**: It is critical to evaluate equity investments in your portfolio, when you are looking to seek higher returns as compared to debt. Financial Modeling knowledge goes a long way in helping you understand the finer points of company's financial statements . This will help in making sound investments in companies with growth potential (Wrong investments in equity can cause capital destruction)

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## Why Cians Academy?

### Value Proposition

- ✓ The curriculum has been designed in collaboration with industry veterans and the senior management of Cians Analytics, with decades of top-class experience in the Finance industry
- ✓ The course structure has been designed with an emphasis on the skills that are required for building comprehensive financial models
- ✓ Our pedagogy leans towards real-world case studies that cover the Private Equity, Equity Research and Investment Banking verticals
- ✓ Our trainers have years of training and industry experience

*Theory is important but its our practical experience that sets us apart*

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### Skills We Aim to Impart

Become proficient with excel functions to build models

Analyse and interpret financial statements like an Investment Banking Analyst

Understand the broad modeling requirements of a private equity analyst

Learn to appraise project feasibility like a corporate finance analyst



Estimate future company share prices in the manner of an equity analyst

Perform data analytics to identify trends and themes in a data set

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## Why Financial Modeling ?

Financial institutions constantly utilize excel models to assess the potential of any deal or returns from a project.

There is a firm dependence on financial modeling to estimate the future growth of companies, calculate potential valuation, and identify any trends that may impact investment decisions.

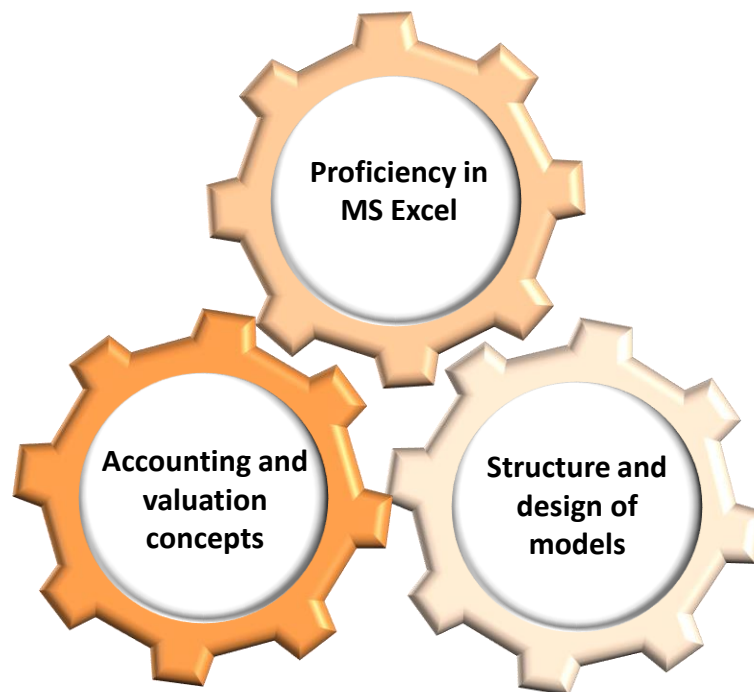
*Financial Modeling is a  
Black Box of the Finance  
Industry...*

*We will help Demystify it  
for you*

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## Our Approach Towards Financial Modeling

Having liaised and worked with prominent global financial institutions, we believe financial modeling is a three-legged stool based on:



# Indicative Applications of Modeling (1/3)

## Consultants/Analysts Use Models to Project Future Sales and Expenses of Companies

### Real World Business Problem

A consultant wants to evaluate an agriculture business with different operating segments

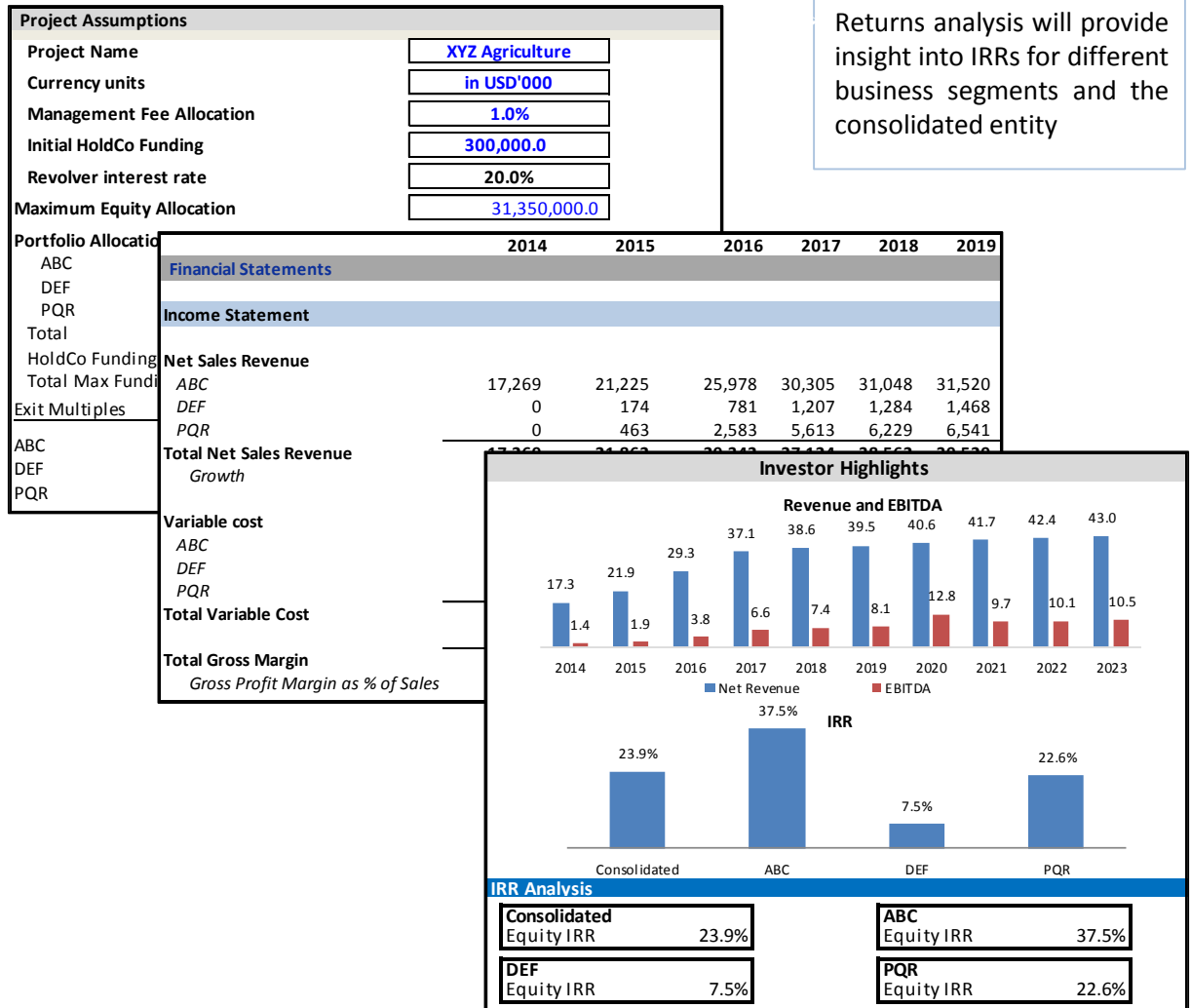
### Solution

Create detailed consolidated financials by projecting different business segments, including valuation and returns analysis

### Outcome

Consolidated financials will help project performances for different business segments

Returns analysis will provide insight into IRRs for different business segments and the consolidated entity



# Indicative Applications of Modeling (2/3)

## Valuation Advisors Use Models for Valuation Projections

### Real World Business Problem

A Valuation advisor wants to evaluate an investment opportunity in a consumer sector business

### Solution

A detailed business model with DCF, sensitivity analysis and football field analysis

### Outcome

A DCF analysis will provide the intrinsic value of the business while the sensitivity analysis will provide a range of valuations under different assumption scenarios

Return Assumptions	
Investment date	Jan-14
Management Equity Ownership	15.0%
Management Equity Investment (in USD'000)	500
Management Exit Year	2017
ABC Equity Ownership	85.0%
ABC Equity Investment (in USD'000)	3,333
ABC Debt Investment	
ABC Exit Year	
Exit EV/EBITDA Multi	

Discounted Cash Flow Analysis					
Date	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18
<b>Discount periods</b>	0.23	1.23	2.23	3.23	4.23
Revenues	30,402	33,905	37,560	41,410	45,501
EBIT	4,999	5,293	6,380	7,171	8,013
EBIT*(1-t)	4,399	4,658	5,614	6,311	7,052
Add: Depreciation & Amort.	551	650	696	727	759
Change in Working Capital	(2,063)	(16)	190	(954)	(1,018)
Less: Capital Expenditure	(1,801)	(1,209)	(954)	(1,002)	(1,052)
<b>Free Cash Flows to the Firm</b>	<b>1,087</b>	<b>4,083</b>	<b>5,546</b>	<b>5,081</b>	<b>5,741</b>

Terminal Value
Discounting Factors
<b>PV of FCFs</b>
<b>Valuation Analysis</b>
Total PV of FCFs
Terminal Value
Derived EV
Less: Debt
Add: Cash
<b>DCF Value of Equity</b>

ABC Return Analysis					
	2014	2015	2016	2017	2018
<b>Equity Cash Flows</b>					
Equity Invested	(3,333)	-	-	-	-
Distributions	-	-	-	-	-
Exit Value	-	-	-	29,473	-
<b>Cash flows for Equity Investme</b>	<b>(3,333)</b>	<b>-</b>	<b>-</b>	<b>29,473</b>	<b>-</b>
<b>Debt Cash Flows</b>					
Debt invested	(24,167)	-	-	-	-
Interest Expenses	1,208	2,264	2,055	1,682	-
Repayments	1,523	2,090	3,737	16,816	-
<b>Cash flows for Debt Investmen</b>	<b>(21,435)</b>	<b>4,354</b>	<b>5,793</b>	<b>18,498</b>	<b>-</b>
<b>Total Cash Flows to ABC</b>					
Equity Cash Flows	(3,333)	-	-	29,473	-
Debt Cash Flows	(21,435)	4,354	5,793	18,498	-
<b>Cash Flows to ABC</b>	<b>(24,768)</b>	<b>4,354</b>	<b>5,793</b>	<b>47,971</b>	<b>-</b>
IRR	37.3%				
MoC	2.2x				

# Indicative Applications of Modeling (3/3)

## Private Equity Analysts Use Models to Evaluate Deals

### Real World Business Problem

A PE analyst wants to evaluate an opportunity to invest in a manufacturing company

### Solution

A detailed operating model based on the revenue & cost projection  
 Overlay the operating model with LBO transaction assumptions to gauge returns

### Outcome

The operating model will help analyze the performance under multiple scenarios  
 And an LBO analysis will provide insight into IRRs and MoIC if the deal goes through

Model Assumptions	
<b>General Assumptions</b>	
Deal Closing Date	1-Jan-15
Exit Year	31-Dec-18
Transaction Cost	2.0%
Exit Multiple	5.40x
<b>Transaction Structure</b>	
<b>Uses</b>	
Management A	
Management B	
Management C	
Total	
<b>Price Received by Ex</b>	
Short terms bank loans	
Long terms	
Shareholder	
<b>LBO Statistics</b>	
Purchase Price	€ thousands
14-EBITDA	% of Total
Short terms bank loans	
Long terms	
Shareholder	
<b>Debt Assumptions</b>	
Amount / Commitment	
Repayment	
Interest Payment	
Interest Rate	
Amortization (year)	
Convertible Debt	
Post dilution stake	
Minimum Cash Balance	
<b>Sensitivity Analysis</b>	
<b>IRR Sensitivity Analysis</b>	
<b>Senior Debt</b>	
	20.0%
	25.0%
	30.0%
	35.0%
	40.0%
	45.0%
Exit Multiple	5.40x
5.65x	
5.90x	
6.15x	
6.40x	
<b>CoC Sensitivity</b>	
<b>Senior Debt</b>	
	20.0%
	25.0%
	30.0%
	35.0%
	40.0%
	45.0%
Exit Multiple	5.40x
5.65x	
5.90x	
6.15x	
6.40x	
<b>Junior Debt</b>	
	10.0%
	15.0%
	20.0%
	25.0%
	30.0%
	35.0%
Exit Multiple	5.40x
5.65x	
5.90x	
6.15x	
6.40x	

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## About the Course

### Advanced Modeling Course (Investment Banking)

The 10-day program will enable students to build financial models from scratch and use them for solving practical business problems. The classroom program intends to provide hands-on experience to the candidates. This course is designed for:

- ✓ cracking interviews
- ✓ getting acquainted with 3-step financial statements
- ✓ building revenue and cost projections
- ✓ Creating Equity/LBO/Project Finance Models like experts



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## Who should sign up?

- ✓ CA, MBA, and CFA aspirants/candidates who want to pursue a career in finance
- ✓ Undergraduates who want to bridge the gap between theory and practice, and learn about the work streams of a research team
- ✓ Working professionals who need to build or read end-to-end financial models to make recommendations or write reports
- ✓ Professionals looking at a career switch to finance or students who want to get a head start before taking up a job

#### What you get...

- Candidates will be provided a pre-course handbook that has readymade notes on relevant accounting and valuation concepts
- Step-by-step Excel templates for practice following the sessions and solved Excel sheets
- A robust valuation model of a listed company, LBO Model and Project Finance Model

#### Pedagogy

##### Duration:

- 10-day classroom training spread over 60 hours

##### Fees

- **Program fee:** INR 22,000 plus service tax



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# Course Structure

## Day 1 - Overview of Accounting & Valuation and Excel

- Overview of Income statement, balance sheet and cash flow statement
- Overview of accounting adjustments like working capital changes, deferred revenue, DTA/DTL, etc., and their impact on the three financial statements
- Importance of equity valuation
- Techniques of equity valuation
- Basic layout and shortcuts of MS Excel

## Day 2 - Basic MS Excel

- **Basic layout and shortcuts of MS Excel**
- **Basic and Conditional Formatting**
- **Basic Charting – Line & Bar charts, pie charts, combo charts etc.**
- **Pivot tables**
- **More than 30 Basic MS Excel functions like Logical functions, Reference functions etc which are widely used in client work**
- **Goal seek and revolver**

## Day 3 - Equity Model

- Overview of Listed company
- Data sourcing and creating historical financial statements
- Building a bottom-up revenue model
- Cost assumptions
- Building assets and debt schedule

## Day 4 - Equity Model

- Projecting interest expense and dealing with the circular referencing error
- Revolver adjustment
- Interlink age of debt and asset schedules with the projected financial statements
- Completing the operating model

## Day 5 - Equity Model

- Performing DCF analyses using the FCFF approach
- Performing Sensitivity analyses (single- and two-variable tables)
- Performing ratio analyses
- Overview of Trading Comparables and Transaction Comparables for relative valuation
- Football field analysis

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## Course Structure

### Day 6 – Advanced MS- Excel

- Advanced functions including Match/Index, Offset, Indirect, String functions, Date functions, and Array functions
- Understand niche functions, including Etworkeads.Intl, Yield, Transpose, Forecast and Trend, Text, Mod, Db, Sln, Ipmt and Ppmt, Find, Len, Left, Right, Mid, and Mirr.
- Regression analysis
- Advanced charting, including Waterfall chart, Dynamic chart, and Gantt chart
- Goal Seek and Solver to validate assumptions
- Building switches to incorporate different scenarios in a models

### Day 7 – Advanced Financial Modeling

- Overview on Beta and its calculation
- Performing sensitivity analysis using 3D tables
- Circular error check and correction
- Auditing and methods to correct balance sheet differences
- What are investment banks and what do they do
- Pitch Books
- Mock test of Financial Modeling

### Day 8 – LBO Model

- Overview of the global LBO market, know-how, and characteristics of an LBO target
- Understanding the template to analyze LBO
- Building Sources and Uses table
- Allocating goodwill based on the purchase price

### Day 9 – LBO Model

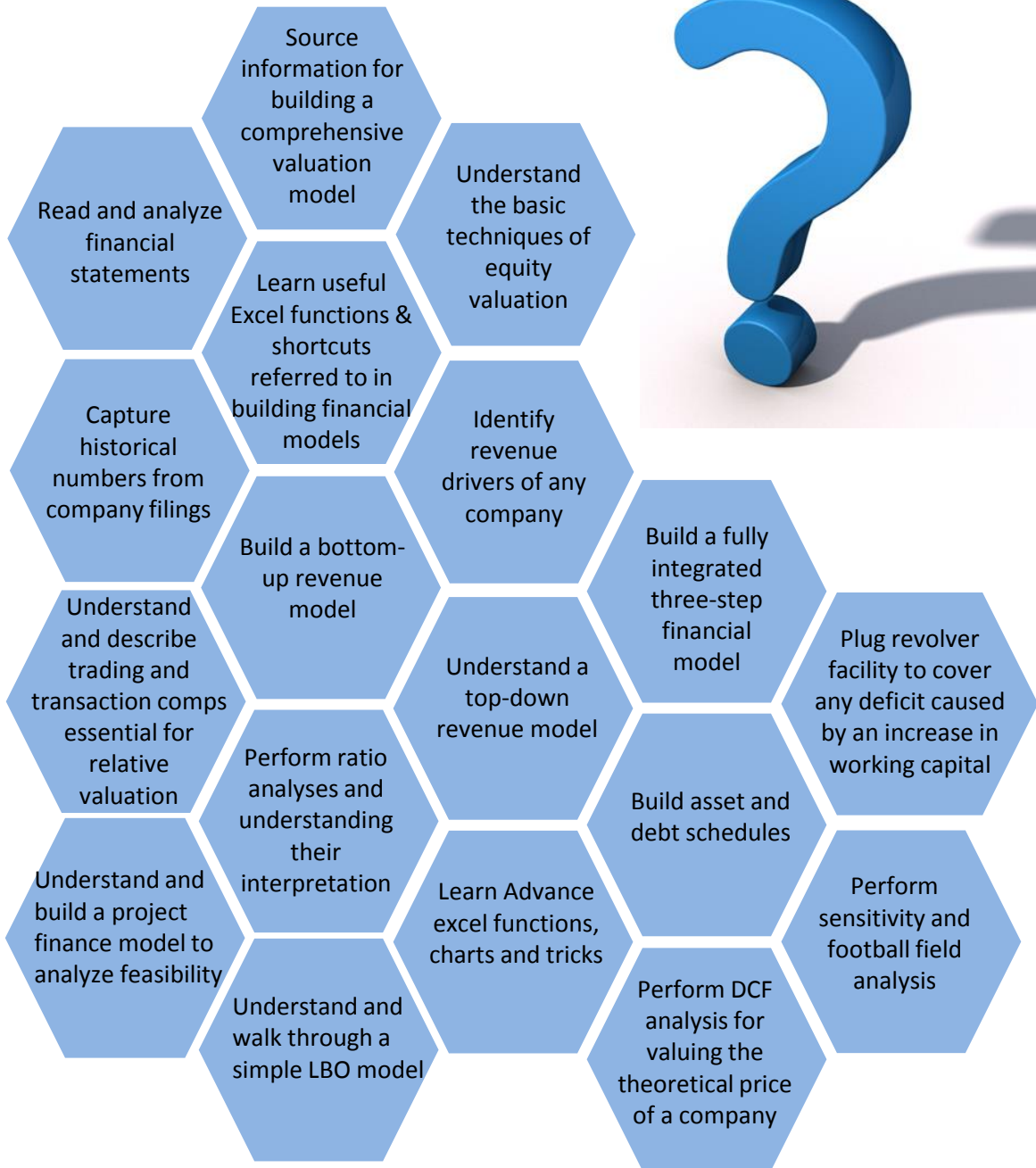
- Creating pro-forma balance sheet to adjust for deal assumptions
- Incorporating flexibility for different debt tranches
- Applying adjustments for cash sweep
- Performing LBO analysis using a case study

### Day 10 – Project Finance

- Overview of the project finance model
- Understanding the template to analyze project feasibility
- Incorporating adjustments for project phasing and government subsidy (if applicable)
- Building waterfall distribution
- Building a robust dashboard to capture the model output

## Course Objective

Post completion students will be able to perform the following functions...



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## Team

### ANMOL BHANDARI, CEO & Co-founder

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- Investment Director & Head of Business Development, Gaia Renewable Capital
- Director, Business Development, Copal Partners
- Hedge Fund Strategies Group, Goldman Sachs
- Harvard Business School, OPM 45
- B.Sc. Electrical Engineering, Villanova University

### AMAN CHOWDHURY, CFA, CEO & Co-founder

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- Country Head, Copal Partners, India
- Vice President, Genpact & J.P. Morgan
- Investment Banker, Credit Suisse & Lazard
- MBA, Darden Business School, University of Virginia
- B.A. Economics, St. Stephen's College

### KARANMALHOTRA

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- Senior Vice President at Cians Analytics
- Analyst, JPMorgan Chase & Co.
- Senior Business Analyst, Evalueserve
- MBA, SCMLD, Pune
- Bachelor's Degree in Commerce, Panjab University

### VAIBHAVAGGARWAL, CFA

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- Senior Member of the Investment Research / Financial Modeling team at Cians Analytics
- Extensive experience in building financial models for various sectors – Oil and Gas, Banking, Retail etc.
- CFA Charterholder
- Bachelor's Degree in Commerce, University of Delhi

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## How to Register?

Interested candidates could register with us by visiting our **registration page** on [www.ciansacademy.com](http://www.ciansacademy.com)

For any further enquiries, you could reach us at:

### Address

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*See You in Class!!!*