

**BSc Economics (Data Science)
4-year AEDP Programme
(2025-2029)**

Rationale

This programme integrates Economics and Data Science, enabling students to develop a comprehensive understanding of core concepts in both fields, which facilitates their ability to carry out various responsibilities in data-driven Economics. For instance, data science reasoning or principles were considered an essential foundational skill for corporate firms working in diverse areas. In addition, this emphasis on dual, yet related, fields through a single degree program provides students with the economic understanding and institutional knowledge to examine a given situation using data science tools like, R Programming Language, Database Management Systems, Introduction to Artificial Intelligence (AI) and Machine Learning (ML), Prompt Engineering and topics related to Generative AI. This interdisciplinary programme aims to help the learner to become industry-ready by bridging the gap between industry and classroom teaching.

Additionally, the key focus of this programme would be the compulsory requirement of 'Apprenticeship in the identified industry.' This will train and prepare the economics students for the diverse roles in the market/industry.

Why Economics and Data Science?

In a world driven by data and defined by decisions, pairing Economics with Data Science empowers students to not only understand the 'why' behind choices, but also predict the 'what's next' with precision.

This unique combination cultivates critical thinkers who can **quantify trends, model outcomes, and offer actionable insights in real time**. It bridges the gap between economic theory and data-driven execution, a skillset increasingly sought after across industries.

To nurture such future-ready professionals, Gokhale Institute of Politics and Economics launches its Apprenticeship-Embedded B.Sc. in Economics and Data Science, offering students the opportunity to learn as they apprentice with industry, gaining first-hand exposure to corporate demands before they graduate.

The details of the **Apprenticeship Embedded Degree Programme (AEDP)** in B.Sc. Economics (Data Science) is as follows.

Programme Overview

The four-year AEDP UG programme is designed to provide students with a combined understanding of **Economics and Data Science** with a key focus on **embedded apprenticeships**. This course is designed for a total of 160 credits, compliant with the NEP 2020 guidelines, which includes 2 semesters of apprenticeship, offering a total of 40 credits.

This programme will focus on theoretical rigour, skill development, and industry experience. As per the UGC's multiple exit-entry framework, the programme offers multiple entry and exit options, catering to diverse academic and professional aspirations.

Additionally, it includes the right mix of courses on the **Ability and Skill Enhancement Courses (ASECs)** and **Value-Added Courses (VACs)**, ensuring holistic skill development of the students.

Programme Objectives

- To impart interdisciplinary knowledge of Economics and Data Science;
- To develop practical thinking, analytical, and reasoning skills related to data science;
- To equip students with real-world exposure to industry through embedded apprenticeships;
- To prepare students for dynamic careers across industry, academia, policy research, and data-driven consulting.

Career Pathways

Graduates of the AEDP program will be equipped for careers in:

- Economics & Policy Research
- Data Analytics & Consulting
- AI/ML and Economics
- Financial Services & Banking
- Development/social Sector

Programme Structure: B.Sc. Economics (Data Science)

Intake	Eligibility Criteria	Total Credits (4 Years)	Fees* (INR)	Reservation Policy
60	Minimum 60% marks in aggregate (50% marks for SC/ST category candidates) in their 12th Standard board examination or equivalent examination.	160 Credits distributed as below: 120 in the first six semesters and 20 credits each for apprenticeship in the seventh and eighth semesters	➤ 1,89,000 (India & SAARC countries) ➤ 3,75,700 (NRI/OCI/Foreign Nationals) *Subject to annual revision	As per the Government of India Policy

- Details about the entrance Exam will be available on the Institute's website on August 14, 2025

Admission Schedule: Tentative

Sr No	Particulars	Date	Comments
1	Registration starts	August 13, 2025 (5.30 pm)	Register Now
2	Date of Entrance Examination	From August 17, 2025 (From Noon), to August 23, 2025 (up to 5.30 pm)	Please go through the FAQ
3	Date of Interview for the selected Candidates	August 26, 2025	Online (Link will be shared)
4	Information about the admission	August 28, 2025	The offer letter will be sent to the selected/ /eligible candidate on their ERP login
5	Date of Documentation Verification	September 1, 2025	At the Gokhale Institute Premises
6	Induction Programme	September 2, 2025	
7	Commencement of the Lecture	September 3, 2025	

Programme Structure:

Semester	Course Catalogue	Course Title	Credits
Semester I	Core Course	Principles of Economics	2
	Core Course	Indian Economy	2
	Core Course	Introduction to Excel	2
	Minor Course	Introduction to Statistics	4
	Inter-disciplinary Course	Mathematics for Economics	4
	Ability Enhancement Course	Languages: French/German (Level 1)	2
	Skill Enhancement Course	Basic Financial Methods	2
	Value Added Course	Yoga and Mental Wellness	2
Total Credits			20
Semester II	Core Course	Microeconomics - I	4
	Core Course	Macroeconomics - I	4
	Minor Course	Intermediate Statistics	2
	Minor Course	Programming with R	2
	Inter-disciplinary Course	Mathematical Economics	2
	Ability Enhancement Course	Languages: French/German (Level 2)	2
	Skill Enhancement Course	Introduction to Cost and Management Accounting	2
	Value Added Course	Indian Knowledge System	2
Total Credits			20

* Detailed Syllabus and programme structure for the remaining semesters will be shared in due course of time

Credit Structure (As per Curriculum and Credit Framework Guidelines by UGC 2022)

Semester	Major	Minor	Multi-disciplinary	Ability Enhancement	Skill Enhancement	Value Added	Total Credits*
1	6	4	4	2	2	2	20
2	8	4	2	2	2	2	20
3	8	4	2	2	2	2	20
4	8	8	0	2	2	0	20
5	10	8	0	0	2	0	20
6	20	0	0	0	0	0	20
Total	60	28	8	8	10	6	120

*The fourth year will be entirely dedicated to an apprenticeship worth 40 credits.

