

Department of Statistics

Pirojpur Science and technology University

Career Prospects for Graduates of the B.Sc. (Honors) in Statistics

Graduates of the Department of Statistics, completing the comprehensive 4-year B Sc (Honors) program, are well-equipped with theoretical knowledge and practical skills in statistical analysis, programming, data science, and research. The curriculum covers a wide range of areas such as probability, inference, sampling, regression, multivariate analysis, machine learning, actuarial statistics, econometrics, epidemiology, and statistical software (R, SPSS, Python, STATA, C++).

Government Sector Opportunities

Graduates are eligible for various government jobs through Bangladesh Civil Service (BCS) and other public recruitment exams. **Key roles include:**

- ✓ **BCS**—General Cadre; General Education; Professional Cadre (Finance, Economic)
- ✓ **Public University**—Lecturer of Statistics
- ✓ **Statistics Officer / Statistical Analyst**— Bangladesh Bureau of Statistics (BBS), Planning Commission, Ministry of Health, etc.
- ✓ **Statistics Officer**— District and Upazila Level
- ✓ **Demographer/Epidemiologist**—Directorate General of Health Services, NIPORT, IEDCR, ICDDR, B.
- ✓ **Bangladesh Bank** —Assistant Director
- ✓ **Actuarial and Economic Analyst** —General Economics Division
- ✓ **Programmer / Data Manager** — ICT Division, Digital Bangladesh projects
- ✓ **Government Banks** — Senior Officer; Officer
- ✓ **Planning Commission / Economic Relations Division (ERD)** — Policy Analyst
- ✓ **Agriculture and Environment Ministries** — Data Scientist in climate and agri-research
- ✓ **Election Commission / BRTA / NBR** — Data processing and statistical modeling role

Private Sector Opportunities

The growing demand for data-driven decision-making has created significant opportunities in the private sector:

- ✓ **All Private University**— Lecturer of Statistics (Entry level)
- ✓ **Banks and Financial Institutions** —Probationary Officer/MTO/ SO/ Risk Analyst, Credit Scorer, Financial Forecaster
- ✓ **Insurance Companies** — Actuarial Analyst, Pricing Analyst
- ✓ **Telecommunication and IT Companies** — Data Scientist, Machine Learning Analyst
- ✓ **Pharmaceutical and Health Research** — Biostatistician, Clinical Data Manager
- ✓ **Market Research Firms** — Survey Analyst, Marketing Data Analyst
- ✓ **Financial Analyst** — Investment firms, audit companies
- ✓ **International Organizations and NGOs (ICDDR, B, WHO, UN, World Bank etc.)** — M&E Officer, Impact Assessment Analyst
- ✓ **Tech Companies and Startups** — Programmer (R, Python, C++), Data Engineer
- ✓ **Research Institutes and Universities** — Research Assistant, Data Consultant
- ✓ **AI/Machine Learning Specialist** — Tech startups, data science firms

Research and Higher Education

With strong foundations in research methodology, simulation, meta-analysis, and project work, graduates can pursue:

- ✓ **Postgraduate Studies (M.S, M.Phil., Ph.D.)** – In Bangladesh and abroad (especially in Statistics, Economics, Econometrics, CSE, Data Science, Epidemiology, Bioinformatics)
- ✓ **Research Assistant / Data Manager** – International NGOs, ICDDR, B, UN agencies (UNDP, WHO), and development organizations (BRAC)

Emerging Fields and Advanced Roles:

The inclusion of modern courses like **Artificial Intelligence in Statistics, Statistical Machine Learning, Bioinformatics**, and **Big Data tools (R, Python, STATA, SPSS)** prepares students for careers in:

- ✓ AI and Machine Learning
- ✓ Bioinformatics and Genomic Data Analysis
- ✓ Big Data Analytics
- ✓ Decision Science and Simulation Modeling
- ✓ Epidemiology and Health Informatics

Entrepreneurial and Freelancing Opportunities:

Students skilled in data analysis software and programming (R, Python, STATA, SPSS) can work as:

- ✓ Freelance Data Analyst or Statistical Consultant
- ✓ Content Creator for Data Education Platforms
- ✓ Startup Founder in Analytics Services

This diverse academic foundation allows Statistics graduates to become valuable contributors to data-driven decision-making in both public policy and private innovation in Bangladesh and beyond.