Applications are invited for admission into BSc in Data Science & Analytics Program in Fall 2024 semester starting in September 2024

## BSc in Data Science & Analytics@ EWU

This is a unique BSc program and is designed for undergraduate students who are very much interested in Computing, Mathematics and Statistics. This is a four-year bachelor's program with 130 credits. Data Science & Analytics is the subject which has worldwide demand, particularly in industry. The curriculum of the program is designed to maintain international standards. Graduates in Data Science & Analytics have wide career developing option.

## **Special Features of the Program**

- ExperiencedFaculty members with PhD
- Modern Up-to-date Curriculum
- State of the art Computer Laboratory facility
- A modern Library with up-to-date Books and Journals
- Academic collaboration with other prestigious Universities
- Undergraduate Teaching Assistantships opportunities
- Scholarship/ Financial assistance
- Bright employment opportunities

## **Admission Requirements**

- Minimum GPA of 3.00 in both SSC and HSC Examinations with mathematics in higher secondary level OR
- Candidates must have passed University of London and Cambridge GCE 'O' Level in at least five subjects and 'A' Level in at least two subjects including mathematics. Only the best five subjects in 'O' Level and best two subjects in 'A' Level including mathematics will be considered. Out of these seven subjects, a candidate must have at least 4B's or GPA of 4.00 in the four subjects and 3 C's or GPA of 3.5 in the remaining three subjects. (in the scale of A=5, B=4, C=3, D=2 and E=1

  OR
- American High School Diploma,

AND

- Acceptable EWU Admission Test Score
- The final selection of candidates for admission in the Undergraduate Program at EWU will be based on the Admission Test scores obtained with 75% from admission test, 10% from SSC/O-level and 15% from HSC/A-level.

**Admission Fee :**Tk. 20000 (Non-refundable)

**Tuition Fees**: Tk 5000 per credit

Computer Lab Fee – 4500 (each semester) Student Activity Fee – 1600 (each semester)

**Total Approximate cost 7 Lac 51 Thousand 8 Hundred** 

Last date of Application: August 14, 2024

Admission Test: August 17, 2024 at 2.30 p.m.

For details please contact
Admission Office, East West University
Plot A/2Johurul Islam City, Aftabnagar, Dhaka-1212 or Call: 09666775577 (Ext. 234, 422) Mobile: 01755587224, 01851933094
e-mail:admissions@ewubd.edu; Website: http://www.ewubd.edu

Curriculum for B.Sc. in Data Science and Analytics

Total minimum credit hours of the curriculum are 130 and the credit distributions are described below:

A	GED Courses	33C
В	Core Courses	<b>79</b> C
С	Elective Courses	18C
Total		130C

A. GED Courses (33C)		
Credit		
Hours		
	(i) English Communication Skills 2 Courses (6C)	
3	ENG101– Basic English	
3	ENG102– Composition & Communication Skills	
	(ii) Business/Entrepreneurship/Social Sciences &	
	Liberal Arts; Any 1 Course (3C)	
3	BUS101– Introduction to Business	
3	EDC101– Basic Entrepreneurship	
3	GEN206– Introduction to Sociology	
	(iii) Computer Skill/Programming skills;	
	1 course (3C)	
3	CSE101– Introduction to Computers I	
	(iv) Quantitative/Science/Environment Knowledge;	
	Any 2 courses (6C)	
3	PHY100– Introductory Physics	
3	GEB101– Basic Biology	
3	GEN203– Ecological System & Environment	
3	SOC212 – Social Ecology, Environment & Society	
	(v) Culture and History Knowledge	
	Any 1 course (3C)	
3	GEN202– Eastern Culture and Heritage	
3	GEN204– Western Thought	
3	GEN226– Emergence of Bangladesh	

Credit		
Hours		
	(vi) Open GED Courses. Any 4 GED courses	
	other than the courses taken in (i) to (v)	
	described before; Some of them are listed	
	below (12C)	
3	PPHS102 –Introduction to Public	
	Health Sciences	
3	GEN205– Introduction to Psychology	
3	GEN206– Introduction to Sociology	
3	GEN207– Industrial Psychology	
3	GEN208– Introduction to Philosophy	
3	GEN210– International Relations	
3	GEN211- Concepts of Journalism & Media	
	Studies	
3	GEN239– Professional Ethics	
3	ACT101– Financial Accounting	
3	ECO101- Principles of Microeconomics	
3	ECO102- Introduction to Macroeconomics	
3	FIN101– Principles of Finance	
3	MGT101- Principles of Management	
3	MKT101– Principles of Marketing	
3	Any other GED course approved	
	by the University	

B. Core	B. Core Courses (79C)		
Credit Hours	A student must take the following Core Courses		
	Mathematics & Statistics Courses (25C)		
3	MAT101- Differential & Integral Calculus		
3	MAT102– Differential Equations & Special Functions		
3	MAT291– Linear Algebra		
3	MAT295 – Discrete Mathematics		
4	MAT397– Numerical Methods & Optimization		
3	STA191– Probability & Statistics		
3	STA293– Probability Distributions		
3	STA395– Statistical Inference		
	Computing Courses (16C)		
4	CS191– Programming with C		
4	CS295– Programming with Python		
4	CS397– Data Structure & Algorithm		
4	CS399– Artificial Intelligence		
	Data Science Courses (38C)		
4	DSA101– Introduction to Data Science		
4	DSA201– Data Processing & Storage		
3	DSA303– Regression Analysis		
3	DSA305– Multivariate Analysis		
3	DSA 307– Generalized Linear Model		
4	DSA401– Data Mining		
4	DSA403– Machine Learning		
4	DSA405– Big Data & Cloud Computing		
3	DSA407– Data Security & Privacy		
6	DSA499– Data Science Project		

C. Elective Courses (18C)		
Credit	(	
Hours	Group of A and B) from the Elective Modules	
	Group A (9C)	
3	STA430– Stochastic Processes	
3	STA432– Bayesian Statistics	
3	STA434– Time Series Analysis	
3	STA436– Experimental Design	
3	STA438– Biostatistics	
3	STA440– Information Systems	
3	ECO465– Basic Econometrics	
	Group B (9C)	
3	CS410– Deep Learning	
3	CS412– Data Visualization	
3	CS414– Cryptography & Blockchain	
3	CS416– Bioinformatics	
3	CS418– Machine Learning for Health Sciences	
3	CS420– Machine Learning for Cyber Security	
3	BUS420– Business Intelligence	
3	FIN7430– Foundation of Financial Technology	
3	FIN7431– System Analysis & Design	

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