

## Post-Graduate Programs in Data Science

### Degree Names

Sl.	Full Name	Short Name	Remarks
1	Master of Science in Data Science	M. Sc. (Data Science)	18 Credit courses + 18 Credits Thesis
2	Master of Data Science	M. Data Science	30 Credit courses + 6 Credits Project
3	Doctor of Philosophy	Ph.D.	Program Name: Data Science

### Admission Requirements

#### *For Master's Degrees*

The admission requirement for the Master's programs is as follows.

1. 4-year B.Sc. in Computer Science and Engineering (CSE)/ Electrical and Electronic Engineering (EEE)/ Computer Science (CS)/ Computer Engineering (CE)/ Electrical and Computer Engineering (ECE)/ relevant fields, or 4-year Bachelor's degree in other engineering/ other mathematical science or natural science/ business information systems/ related field.

#### *For Ph.D. Degrees*

The admission requirement for the Ph.D. program is as follows:

1. Master's degree in Computer Science and Engineering (CSE)/ Electrical and Electronic Engineering (EEE)/ Computer Science (CS)/ Computer Engineering (CE)/ Electrical and Computer Engineering (ECE)/ Data Science/ relevant fields, or Master in other engineering/other mathematical science or natural science/ business information systems/ related field.

## Degree Requirements

Program	Mode	Courses			Thesis/ Project Credit	Total Credit
		Total Number of Courses (Credit)	Number of Foundation Courses	Minimum Number of Core Courses		
M. Sc. (Data Science)	Thesis Based	6 Courses (18 Credit)	3 (Audit course)	4	18 Credit	36 Credit
M. Data Science	Course Based	10 Courses (30 Credit)	3 (Audit course)	6	6 Credit	36 Credit
Ph.D.	N/A	3 Courses (9 Credit)	3 (Audit course)	2	45 Credit	54 Credit

### NOTES:

1. Audit courses may be waived by BPGS depending on the background of a student upon application.
2. The remaining required courses (i.e., courses other than the Foundation courses and Core courses) can be taken from any PG courses.
3. The thesis/project must be on a topic relevant to the program area.

### Courses

#### ***Foundation Courses***

1. CSE 5501: Foundations of Data Science
2. CSE 5502: Programming for Data Science
3. CSE 5503: Artificial Intelligence and Machine Learning

#### ***Core Courses***

1. CSE 6413: Network Science
2. CSE 6501: Advanced Artificial Intelligence
3. CSE 6506: Data Mining
4. CSE 6510: Natural Language Processing
5. CSE 6512: Advanced Machine Learning
6. CSE 6513: Business Intelligence
7. CSE 6514: Big Data Analytics

8. CSE 6515: Data Visualization
9. CSE 6708: Semantic Web
10. CSE 6709: Deep Learning