

## Post-Graduate Programs in Computing

### Degree Names

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

### Admission Requirements

#### *For Master's Degrees*

There are two groups who will be eligible for admission for the Master's programs and the admission requirements are as follows.

1. [Group A] 4-year B.Sc. in Computer Science and Engineering (CSE) or Electrical and Electronic Engineering (EEE) or Computer Science (CS) or Computer Engineering (CE) or Electrical and Computer Engineering (ECE) or equivalent field
2. [Group B] 4-year Bachelor's degree in any other engineering or mathematical science or natural science or related field.

#### *For Ph.D. Degree*

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

1. [Group A] Master's degree in Computer Science and Engineering (CSE) or Electrical and Electronic Engineering (EEE) or Computer Science (CS) or Computing or Computer Engineering (CE) or Electrical and Computer Engineering (ECE) or equivalent field
2. [Group B] Master's degree in any engineering field other than mentioned in Group A above.

## Degree Requirements

1. For students satisfying Group A entry 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. (Computing)	Thesis Based	6 Courses (18 Credit)	0	4	18 Credit	36 Credit
M. Computing	Course Based	10 Courses (30 Credit)	0	6	6 Credit	36 Credit
Ph.D.	N/A	3 Courses (9 Credit)	0	2	45 Credit	54 Credit

2. For students satisfying only Group B entry 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. (Computing)	Thesis Based	6 Courses (18 Credit)	2 (Audit course)	4	18 Credit	36 Credit
M. Computing	Course Based	10 Courses (30 Credit)	2 (Audit course)	6	6 Credit	36 Credit
Ph.D.	N/A	3 Courses (9 Credit)	2 (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 5401: Computing Foundation – I
2. CSE 5402: Computing Foundation – II

### ***Core Courses***

1. CSE6401: Parallel Algorithms
2. CSE6402: Graph Theory
3. CSE6403: Computational Geometry
4. CSE6404: VLSI Layout Algorithms
5. CSE6405: Graph Drawing
6. CSE6407: Combinatorial Optimization
7. CSE6408: Advanced Algorithms
8. CSE6409: Stringology
9. CSE6410: Advanced Algorithmic Graph Theory
10. CSE6413: Network Science
11. CSE6705: Meta-Heuristics