

## NAGINDAS KHANDWALA COLLEGE OF COMMERCE, ARTS & MANAGEMENT STUDIES

**Programme:** Master of Science (Geoinformatics)

**Academic year:** 2025-26

### Curriculum Framework of First Year under NEP

| Level | Sem.    | Major                                             |                                                   | Minor   | OE   | VSC, SEC (VSEC) | AEC, VEC, IKS | OJT, FP, CEP, CC, RP | Credits                | Cumulative Credits |
|-------|---------|---------------------------------------------------|---------------------------------------------------|---------|------|-----------------|---------------|----------------------|------------------------|--------------------|
|       |         | Mandatory (DSC 1 & DSC 2)                         | Electives                                         |         |      |                 |               |                      |                        |                    |
| 4.5   | I       | Fundamentals of Remote Sensing (04)               | Introduction to QGIS (04)                         | RM (04) | ---- | ----            | ----          | ----                 | 4+4+4+<br>2+4+4=<br>22 | 44                 |
|       |         | Fundamentals of the Earth’s System (04)           | Introduction to 21 <sup>st</sup> Century GIS (04) |         |      |                 |               |                      |                        |                    |
|       |         | Fundamentals of Computers (04)                    |                                                   |         |      |                 |               |                      |                        |                    |
|       |         | Fundamentals of Mathematics (02)                  | Travel and Tourism Management (04)                |         |      |                 |               |                      |                        |                    |
|       | II      | Geo Environmental Science and Remote Sensing (04) | Programming with Python (04)                      | ----    | ---  | ---             | ---           | Internship (04)      | 4+4+4+<br>2+4+4=<br>22 |                    |
|       |         | Introduction to Python (04)                       | Digital Image Processing (04)                     |         |      |                 |               |                      |                        |                    |
|       |         | Spatial Analysis on Statistical Methods (04)      |                                                   |         |      |                 |               |                      |                        |                    |
|       |         | Tools and Techniques in Geoinformatics (02)       | Principles of Cartography (04)                    |         |      |                 |               |                      |                        |                    |
|       | Cum Cr. | 28                                                | 8                                                 | 4       | ---- | ----            | ----          | 4                    | 44                     |                    |

**Programme:** Master of Science (Geoinformatics)

**Academic year:** 2025-26

**Curriculum Framework of Second Year under NEP**

| Level | Sem.                                  | Major                                                                              |                                                                                 | Minor/<br>RM | OJT/ FP | RP                    | Credits            | Cumulative<br>Credits |
|-------|---------------------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------|---------|-----------------------|--------------------|-----------------------|
|       |                                       | Mandatory                                                                          | Electives<br>(Choose Any One)                                                   |              |         |                       |                    |                       |
| 6.5   | III                                   | Advanced Research Methodology-I (04)                                               | Online Research Tools (04)<br><b>OR</b><br>Data Analysis Using Spreadsheet (04) | -            | -       | Research Project (04) | 4+4+4+2+4+4=<br>22 | 44                    |
|       |                                       | Advances in Remote Sensing and Advanced Techniques in Spatial Data Processing (04) |                                                                                 |              |         |                       |                    |                       |
|       |                                       | Advances in GIS (04)                                                               |                                                                                 |              |         |                       |                    |                       |
|       |                                       | Web Designing (02)                                                                 |                                                                                 |              |         |                       |                    |                       |
|       | Credits                               | 14                                                                                 | 4                                                                               | 0            | 0       | 4                     | 22                 |                       |
|       | IV                                    | Advanced Research Methodology-II (04)                                              | Google Earth and Google Maps (04)<br><b>OR</b><br>Introduction to AutoCad (04)  | -            | -       | Research Project (06) | 4+4+4+4+6=<br>22   |                       |
|       |                                       | Geoinformatics and Healthcare (04)                                                 |                                                                                 |              |         |                       |                    |                       |
|       |                                       | Database Management Systems (04)                                                   |                                                                                 |              |         |                       |                    |                       |
|       | Credits                               | 12                                                                                 | 4                                                                               | 0            | 0       | 6                     | 22                 |                       |
|       | Total credits in 2 <sup>nd</sup> year | 26                                                                                 | 8                                                                               | 0            | 0       | 10                    | 44                 |                       |
|       | Cum Cr. Of 1st and 2nd year           | 54                                                                                 | 16                                                                              | 4            | 4       | 10                    | 88                 |                       |