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| ***Code*** | ***Title*** | ***Credits*** | ***Option*** |
| First Semester | | | |
| GS 5101 | Introduction to Geographical Information  Systems (GIS) | 2 | Compulsory |
| GS 5102 | Introduction to Remote Sensing | 2 | Compulsory |
| GS 5103 | Spatial Database Management | 2 | Compulsory |
| GS 5104 | Fundamentals of Global Positioning Systems (GPS) | 1 | Compulsory |
| GS 5105 | Surveying and Spatial Measurements | 2 | Compulsory |
| \*ST 5101 | Calculus and Matrix Algebra | 2 | Prerequisite |
| \*ST 5102 | Basic Statistics | 2 | Compulsory/  Prerequisite |
| ST 5106 | Computer Programming | 2 | Elective |
| Second Semester | | | |
| GS 5201 | Fundamentals of Spatial Statistics | 2 | Compulsory |
| GS 5202 | Thematic Mapping, Cartography and  Photogrammetry | 2 | Compulsory |
| GS 5203 | Spatial Modeling and Analysis | 2 | Compulsory |
| GS 5204 | Advanced GIS and Applications | 3 | Compulsory |
| GS 5205 | Advanced Digital Image Processing | 2 | Compulsory |
| GS 5206 | Microwave Remote Sensing | 2 | Compulsory |
| CS 5212 | Scientific Writing and Proposal Formation | 2 | Elective |
| Second Year First Semester | | | |
| GS 5198 | Directed Study | 2 | Compulsory |
| GS 5199 | Seminar | 1 | Compulsory |
| GS 6102 | Advanced Remote Sensing and Applications | 2 | Compulsory |
| GS 6103 | Recent Advances in Geo-Informatics | 2 | Compulsory |
| GS 6104 | Spatial Data Infrastructure | 1 | Compulsory |
| GS 6101 | Statistical Methods for Spatial Data analysis | 2 | Elective |