Course: Remote Sensing and GIS

Course Code: noc20-ce29

Session: 2019-20

Duration: 12 Weeks

Assessment procedures: Weekly Assignment (25%) + proctored certification Exam (75%)

Curriculum of the Course:

Week 1:

- Rudiments of remote sensing and advantages, Historical Perspective of development of remote sensing technology

Week 2:

- Laws of Radiation and their relevance in Remote Sensing, Basis of remote sensing image representation

Week 3:

- Prominent characteristics of IRS, Cartosat, ResourceSat etc.

Week 4:

- Importance of digital image processing

Week 5:

- Atmospheric errors and corrections, Geometric transformations /Georeferencing Technique

Week 6:

- Digital Image Processing Software

Week 7:

- Supervised image classification techniques and limitations

Week 8:

- High Spatial Resolution Satellite Images and limitations

Week 9:

- NDVI and other indices, Image merging techniques, Radar Images interpretation and applications , SAR Interferometry (InSAR) Technique

Week 10:

- Remote Sensing integration with GIS and GPS

Week 11:

- Integrated applications of RS and GIS in groundwater studies

Week 12:

- Google Earth and its utilization, Integration of satellite images with Digital Elevation Models and generation of 3D perspective

List of students enrolled

S. No.	Name of Student
1.	Bhaarat
2.	Himanshu grag
3.	ravi kant sahu