# Lecture Plan
## Department of Planning, School of Planning and Architecture, Vijayawada

## Name of Course: Introduction to Information Systems (MPIS102)

Programme & Sem:      **Master of Planning (PG), Semester   One**
Course Duration:      August 01 to Nov 16, 2018
Course Coordinator:   Valliappan AL, Assistant Prof., (valliappan.al@spav.ac.in);
Number of Credits:    03
Subject Category:     Theory
Total Periods/Week:   1 (See Time Table for details)
Internal Assessment   50 (minimum pass marks 50%)
End Evaluation        50 (minimum pass marks 50%) – Exterrnal Jury
Total Marks           100 (to be converted to CGPA credit pattern as per regulations)

**Subject Objective:**      To introduce the information systems and develop basic computing skills relevant to planning.

| Week | Lecture / Session Topic (Teaching-Learning Objective aimed) | Session Mode (Optional) | References / Suggested Readings |
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| Week 1 (Starting Aug 01) | Information Systems, Concepts and Components | Lecture. | 1. Richard Groot and John Mc Laughlin, Geospatial Data Infrastructure Concepts, Cases and Good practice, Oxford University Press, Oxford.<br><br>2. Date, C. J., An Introduction to Database Systems, Addison-Wesley (8th Ed), 2003 |
| Week 2 (starting Aug 13) | Assessment – 1 :Time bound Test | | |
| Week 3 (Starting Aug 20) | Systems approach to planning, Use of Information Systems for Planning<br><br>Application of CAD, GIS, Remote Sensing, City Engine and other relevant software's in planning | Lecture | 3. McLoughin B.J., (1969) Urban and Regional Planning 'A System Approach', Faber Publications, London.<br><br>4. Demers, Michael N., (2000) 'Fundamentals of Geographic Information Systems' (2nd edition) John Wiley & Sons, Inc., ISBN No.47131423-4<br><br>5. Resources.arcgis.com/en/community/cityengine/01w900000006000000.htm |
| Week 4 (Starting Aug 27) | National Urban Information System (NUIS), National Spatial Data Infrastructure and Natural Resources Data Management System | Lecture | 6. www.moud.gov.in/nuislocalbodies.up.nic.in/guidelines.pdf |
| Week 5 (Starting Sept 03) | Field Work (September 03-07) | | |
| Week 6 (Starting Sep 10) | Bio-diversity information System; Indian Bio resource information Network, Water Resource | Lecture | 7. Haklay, M 'From Environmental Information Systems to Environmental Informatics- Evolution and Meaning', CASA, UCL Working paper series. |

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| | Information System (WRIS) and Environmental Information System | | 8.  Paradzayi, C & Rither, H 'Evolution of Environmental Information systems in Africa', Journal of International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Vol. XXXIV, part6/W6, PP.73-77 |
| Week 7 (Starting Sep17) | Bhuvan; National Remote Sensing Centre; Indian Space Research Organization and Census of India, National Sample Survey Organisation (NSSO), Directorate of Economics and Statistics and University Consortium for Geographic Information System (UCGIS) | Lecture | 9.  Bhwan.nrsc.gov.in  <br> 10.  www.nrsc.gov.in  <br> 11.  www.isro.org  <br> 12.  www.censusindia.gov.in  <br> 13.  www.ucgis.org  <br> 14.  http://www.mospi.nic.in |
| Week 8 (Starting Sep 24) | Assessment:II- Time bound Test | | |
| Week 9 (Starting October 01) | Standardization of software, Open Geospatial Consortium (OGC), GIS libraries; GDAL/OGR, and Central Statistical Office (CSO); Archaeological Survey of India (ASI), National Family Health Survey (NFHS) and Pollution Control Boards, Meteorology, Information and Communications Technologies | Lecture | 15.  www.geopackage.org  <br> 16.  www.mospi.nic.in  <br> 17.  www.asi.nic.in  <br> 18.  www.rchiips.org/nfhs  <br> 19.  www.moef.nic.in  <br> 20.  Laudon, K., & Laudon, J. (2014): Management information systems. (13 ed.,) Saddle River: Prentic Hall publications, New Jersey. |
| Week10 (Starting October 08) | Introduction to hardware and software, Communication and technologies and Networks; Operating Software's, Application packages and user written programs | Lecture | 21.  www.programmingbasics.org/ |
| Week 11 (Starting October 15) | Dussera Vacation (Oct 15 - Oct 19) | | |
| Week 12 (Starting Oct 22) | Assessment – 3 (from October 22-26-): Time bound Test | | |
| Week 14 (Starting Oct 29) | Open source and proprietary GIS software; | Lecture | 22.  <br> http://www.e-education.psu.edu/lidar/book/export/html/1809 |
| Week 15 (Starting Nov 05) | Web GIS and Location Based Services. | Lecture | 23.  <br> J.K.Berry (1996): Beyond Mapping; concepts, algorithms, and issues in GIS, Wiley Publications, London |

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| Week 16 (Starting Nov 12) | Future Information Systems - Cloud computing; Characteristics and Components and 3D visualization | Lecture | 24. Mahmood Zaigham et al (2014). Cloud Computing: Concepts, Technology & Architecture first edition. Pearson Publications |
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Note:
1. Any other closed holidays as declared by SPAV shall supercede the above lecture plan. Holidays shown above may alter as per Notice from time to time.
2. Assessment Sessions may be re-scheduled, with prior intimation.
3. Reading lists provided is not exhaustive and is subject to addition – students are advised to follow progression of class to keep abreast of the new reading lists, if any.