

# **CENTRAL UNIVERSITY OF RAJASTHAN**

INDUCTION BOOKLET (Academic Year 2018-2019)

Department of Society Technology Interface Digital Society School of Social Sciences



CENTRAL UNIVERSITY OF RAJASTHAN NH-8, Bandar Sindri, Dist-Ajmer-305817, Rajasthan, INDIA Website: <u>www.curaj.ac.in</u>

# About The University

### The University

The Central University of Rajasthan has been established by an Act of Parliament (Act No. 25 of 2009, The Gazette of India, No. 27, published on 20th March, 2009 as a new Central University, and is fully funded by the Government of India. The Government of India also established 11 more Central Universities in Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Jharkhand, Karnataka, Kerala, Orissa, Punjab, Rajasthan and Tamil Nadu.

### The Visitor

The President of India, His Excellency Shri Ram Nath Kovind, is the Visitor of the Central University of Rajasthan.

#### The Chancellor

Dr K. Kasturirangan is currently the Chairman, Public Affairs Centre, Bangalore Chairman, Karnataka Knowledge Commission, Member, Atomic Energy Commission an Emeritus Professor at the National Institute of Advanced Studies an Honorary Distinguished Advisor, Indian Space Research Organisation, an Emeritus Professor at the National Institute of Advanced Studies. Earlier, as Chairman of ISRO, he oversaw the space programme of India between the years 1994 and 2003. He has been conferred with the highest civilian honours Padma Shri, Padma Bhushan and Padma Vibhushan by the President of India and Award of 'Officer of the Legion d'honneur' by the President of the French Republic, France.

#### The Vice Chancellor

The President of India, in his capacity as the Visitor of the University, has appointed Prof. (Dr.) Arun K. Pujari as the second Vice Chancellor of the University.

Prof. Pujari is Professor of Computer Science from the University of Hyderabad. He is currently Vice Chancellor, Central University of Rajasthan, Bander Sinderi, Ajmer. Prior to joining UoH, he served at Automated Cartography Cell, Survey of India, and Jawaharlal Nehru University, New Delhi. He received PhD from the Indian Institute of Technology, Kanpur and MSc from Sambalpur University, Sambalpur.

### Permanent Site for the University

The state government has allocated 518+ Acres of land for the permanent site of the Central University at Bander Sindri near Kishangarh on Jaipur – Ajmer Road (NH-8).



### Vision

The Central University of Rajasthan aspires to be one of India's most dynamic and vibrant universities, responsive to the changing global trends, providing unparalleled educational opportunities for the learner community especially for those coming from the lower socio-economic strata of society seeking quality education. It proposes to offer innovative undergraduate and graduate academic programmes as well as continuing personal and professional enrichment in selected areas that will lead to the formation of a scholarly community by advancing, sharing and applying knowledge and by facilitating the development of thoughtful, creative, sensitive and responsible citizens.

#### Mission

The mission of the Central University of Rajasthan is to contribute to and work with a sense of Commitment towards the educational, cultural, economic, environmental, health and social advancement of the region and the nation at large by providing excellent undergraduate liberal education and quality programs leading to bachelors, masters, professional and doctorate degrees.

#### Goals

To facilitate accessible and affordable quality education that equips the students with scholarly and professional skills, moral principles and global perspectives.

- To strengthen both faculty and student research addressing basic and regional problems.
- To integrate national and international perspectives into our fundamental four-fold mission of teaching, research, extension and consultancy.
- To explore knowledge and wisdom in order to build a wealth of interdisciplinary academic resources indispensable for sustainable development to accomplish the status of a leading research-intensive university; and to engage in transferring knowledge and technology to the community in order to strengthen and elevate the community potential, and to increase the competitiveness of India at the global level.
- To employ the strategy of proactive management of the university administration and to operate the system within a sensible framework of high-quality governance based on efficiency, transparency and accountability.
- To formulate the University as one of the best places in the world to attain intellectual skills and acquire an affirmative mindset to thrive in an increasingly internationalized and competitive job market simultaneously

acting as responsible citizens of the global community by the inculcation of value-oriented education.

### Objectives

- Building character values and simultaneously forging the careers of the students by developing analytical thinking, individual initiative and responsibility.
- Providing flexible, innovative academic and research programmes and support structures that are responsive to a broad range of learners and regional needs.
- Facilitating a wide range of learning opportunities for learners engaged in graduate, postgraduate and research programmes.
- Encouraging considerate and accountable faculty-student participatory interaction on local, state, national and international affairs.
- Recognizing a special obligation to educate the students coming from minorities and lower socio-economic strata of the society.
- Undertaking research and consultancy on the challenges the region is facing and contributing its expertise for the community.
- Providing means for capacity building for leadership and service through academic programmes, campus activities and creating opportunities for community involvement.

#### **Quality Statement**

In order to meet the challenges of the knowledge era and to keep pace with the knowledge explosion in Higher Education, the Central University of Rajasthan is committed to inculcating and sustaining quality in all the dimensions of Higher Education viz. teaching, learning, research, extension and governance while catering to the regional and global needs.

# Salient Features of CURAJ

- Excellent Infrastructure with Minimal Fee Structure
- All Academic Programmes Unique with High Job Potential
- Only 20-30 Seats in each PG Programme
- School System / Semester System
- Credit System with Credit Transfer
- Grading System
- Bridge Courses
- Continuous Evaluation
- National and International Collaborations
- Regular Feedback from Students
- State-of-the-Art technology-enabled Teaching Methodology (Excellent lab facilities & Smart class rooms)
- Tea-with-Guest Programmes, Case Studies, Quiz
- Seminars, Tutorials, Assignments
- Encouragement to attend Public Lectures/Seminars/Conferences



### **Medium of Instruction and Examinations**

The medium of instruction in mm of all courses conducted in the schools, centers and departments admitted to the privileges of the University shall be English, except in cases of studies/research in Languages

### Attendance

All students must have a minimum 75% of attendance in all individual courses, in order to be eligible to appear at the End of Semester examination for the programme. The attendance in all three sessional tests (in-semester examination) is compulsory for a student to be eligible to take the End of Semester Examination (EoSE), while the best two would be taken into consideration.

### **Examination and Continuous Evaluation**

The Central University of Rajasthan has adopted semester system for all its courses and follows a pattern of transparent and continuous evaluation besides a comprehensive examination at the end of each semester. The students are thus encouraged to be regular in their studies and as a result, a student's burden of being assessed and evaluated gets a spread over the entire semester facilitating better assimilation of the course content. The pattern of continuous evaluation and the related procedures are outlined below.

- (1) Each course shall be allotted credits depending on the quantum of work required to be done for teaching/learning of the course in a semester. The assigning of credits to a course shall be based on the principle that one hour of theory lecture or tutorial per week shall be allotted one credit while two/three hours of practicals/field work in a week shall carry one credit.
- (2) a.

Every department will announce, prior to the commencement of the semester, the courses offered and the names of course instructors in the particular semester along with the prerequisites of each course, indicating the core courses (compulsory), optional courses and audit courses. If a student wishes to audit a course, the attendance requirement can be waived at the discretion of the department and by taking into account the student's background and aptitude with the condition that the student shall meet all the requirements of the tests/seminars/assignment and examinations.

- b. Every student, on the first day of the semester will be advised to register only for just as many courses as he can cope with, but the total of the credits of the courses registered in the parent department must not be below 16 in any semester. Thus, the first day of the semester will be utilized by the faculty of the department for meeting the students individually and completing the registration process.
- c. A student will be given time of two weeks from the date of commencement of semester to finalize his choice of courses which will be done on individual student basis through counselling by the student adviser and the Head of the parent department by taking into account the student's progress, attendance etc. A student thus has an opportunity to opt out of a course within two weeks if the student wishes to take the course during the following year/semesters so as to match the load to his or her ability.
- d. Once the choice of courses is finalized, the department will communicate to the University the consolidated list of courses registered by the students, indicating separately the courses being audited, of the department to the Academic Section/Controller of Examinations within one month of the commencement of a semester. This will form the basis for application of regulations regarding attendance, SGPA/CGPA and promotion to the next semester.
- e. Every student who has registered for a programme shall complete the full quota of the credits stipulated for the programme in not more than twice the total duration of the programme. A student who is asked to repeat a course may be allowed more time if recommended by the Head of the concerned Department.
- (3) A student may be permitted to do certain courses in another Institution subject to compatibility of course content and assessment process with the prior approval of the department and the University may allow transfer of credits of such courses on the recommendation of the Dean of the school. Similar benefit could also be given, on the recommendation of the Dean of the school, if a student has successfully completed a course, equivalent to a core course of the programme for which the student has registered, in a recognized institution prior to joining a programme.
- (4) No Student shall be permitted to appear at the End of Semester Examination (herein after referred to as "EoSE") unless he has attended a regular course of study prescribed for the Programme, i.e., he/she shall be required to put in a minimum of 75% of attendance in lectures, seminars, tutorials and preceptorials provided that the requirement of attendance shall not apply to any Audit Course and Self-study

course organized by the University for which there shall be no formal class room instruction.

(5) The School Board, on the recommendation of the Department concerned, may condone shortage of attendance up to 5%. Cases of shortage of attendance more than 5%, but less than 15%, may be recommended by the Board for consideration of the Vice-Chancellor, with justification, if any, whose decision thereon shall be final

(6)

a. For passing a semester, the assessment of a student shall be based on

(i) Continuous internal Evaluation (shortly called 'CIE') of 35% marks in each course; and(ii) End of Semester Examination('EoSE') of 35% marks in each paper.

- b. For a course, the GE shall have three components, viz. Components 1, 2 and 3
- i. There shall be three Internal Assessment (IA) tests in each course in a semester with atleast two of these in the form of formal tests, the third one can be a formal test, a seminar, at viva-voce examination or an equivalent procedure ensuring that the level of difficulty and the standard of evaluation are commensurate with the student's performance in tests.
- ii. The two best scores out of the three IA tests will be taken in arriving at the final grade in the course. This will provide relief for contingencies arising out of illness or other extra-ordinary circumstances and avoids the need for special tests for the absentees.
- ii. The relative weightage of the components of assessment will be as given in the following table. There shall be four components in the final score in any course:
- . Score in the best of the three IA tests -Component 1
- . Score in the second best of the three 1A tests Component 2
- . Score awarded by the course instructor based on Class attendance/participation/ discipline/seminar/ surprise test etc Component 3
- . Score obtained in the End of Semester Examination EoSE.

Component	Description of the component	Relative Weightage
Component 1	The highest of IA Tests 1,2 and 3	20
Component 2	The second highest of IA Tests 1,2 and 3	20
EoES	Performance at the EoSE	50

- iv. A student who misses out two or all the three of IA Tests 1, 2 and 3 on whatever grounds shall not be permitted to appear for the EoSE.
- v. A student is required to score a minimum of 35% in each course in the EoSE of every semester.
- vi. Internal assessment tests I, II and III may be spaced out with an interval of about a month.
- vii. There shall be no retest in any of the IA Tests l, 2 and 3. If a student appears for only two out of the three IA tests, the student shall be awarded marks on the basis of his/her scores in those two IA tests attended by him/her and with a weightage of 40 out of 100. [Examples: A student scoring 12 in IA Test 1,15 in IA Test II and 14 in IA Test 111 will be awarded 14 + 15 = 29, sum of best two, out of 40. A student scoring 12 and 15 in any two of 1A tests 1,11 and III who is absent for one of the three tests will be awarded 27 out of 40]
- viii. A student who is absent for two or all three IA tests will NOT be permitted to appear for the EoSE and will be required to redo the particular course or an equivalent one in subsequent semesters. However, if the student has put in the necessary minimum attendance, he may be permitted to take the IA Tests in a subsequent semester when the course is on offer in the department.
- c. The norms and standards of evaluation of the performance of a student in various components of Intern Assessment shall be such as may be determined by the concerned Department and approved by the School Board.
- d. For evaluation of Home Assignment, the University may employ one or more assessment tools such as objective tests, paper presentation, problem solving, laboratory work etc, suitable to a course.
- e. There shall be one written I laboratory based EoES of three hours duration carrying 100 marks in each course covering the syllabus prescribed for the course.
- f. Evaluation of Project Report/Dissertation and viva-voce examination shall be made jointly by the supervisor and one other examiner.
- g. A Student will be deemed to have earned the credits allotted to a course, if he obtains the minimum pass marks in course, taking the marks obtained by him in CIE and EoSE of that course into consideration.
- (7) The minimum pass marks of a course will be 35% or 'D' grade on the seven point scale.

(8) The wade: shall be awarded as per scheme given below in Table 1:

Academic performance	Grade	Grade Point	Percentage Equivalent
Outstanding	0	5.50-6.00*	75-100
Very Good	А	4.50-5.49	65-74
Good	В	3.50-4.49	55-64
Average	С	2.50-3.49	45-54
Below Average	D	1.50-2.49	35-44
Poor	Е	0.50-1.49	25-34
Fail	F	0-0.49	0-24
Audit	AU	-	-
Incomplete	Ι	-	-
Withdrawal	W	-	-
Continued Project	Х	-	-
Non completion of course	Ζ	-	-
requirement			

Table 1: Award of Grade: and Grade Points on seven point scale
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\* An increase in one mark in the range 75-100 is equivalent to an increase in

0.02 grade point in that category.

For example in the category of Outstanding

(i) 75 marks is equivalent to 5.50 grade point

(ii) 78 marks is equivalent to 5.56 grade point

(iii) 86 marks is equivalent to 5.72 grade point

(iv) 100 marks is equivalent to 6.00 grade point

Similarly grade point equivalence can be worked out in other category.

Explanation:

### 'E' and 'F' Grades

The 'E' and 'F' grades respectively denote poor and very poor performance in the course as a whole and shall amount to failing in a course; 'F' grade is awarded in case of a student not allowed to appear for EoSE due to poor attendance. A student has to repeat all compulsory/core courses in which he/she obtains either 'E' or 'F' grade, until a pass grade is obtained. A student failing in the final project will also be required to repeat the same. In such elective or other courses in which 'E' or 'F grade is obtained, a student may take the same course or take any other course in lieu of that course from the same category. The 'E' or 'F' grade secured in any course stay permanently on the grade card. The weightage of these grades is not taken into consideration in the calculation of the Cumulative Grade Point Average (CGPA); however, these are counted in the calculation of the Semester Grade Point Average (SGPA). A candidate failing in a course and obtaining 'E' grade shall be required to appear only in the EoSE of that course at the next earliest opportunity. However, if a candidate opts to repeat his sessional tests also, he/she may be permitted to do so. In that case, his/her earlier marks shall automatically stand canceled. A candidate failing in a course and obtaining 'F' grade' shall be required to repeat the entire course at the earliest opportunity. A student who is not permitted to appear at the EoSE on account of shortage of attendance shall have to attend the course again and put in minimum attendance required, in order to be eligible to appear in the EoSE.

### "AU" Grade

This grade is awarded to an audit course and is not counted in the computation of SGPA/CGPA. student who is not allowed to appear for the EoSE in a particular course may on fulfillment of attendance and other requirements, appear for the EoSE in a subsequent semester when the course is on offer by making a request at the start of that semester to the concerned head/Co-ordinator of the department. If the particular course has been modified or discontinued, the student shall be advised to take a specific equivalent course by the Head/Co-ordinator of the department, determined on the basis of the contents, standard and the number of credits.

### "I" Grade

This refers to an incomplete grade, which is required to be converted into a regular letter grade under the following circumstances:

If a student is absent during EoSE of a course due to medical or some other reason of compelling nature or such other special circumstances, he/she may apply for the award of 'I' grade to the Head of the Department offering the course, through the Course Coordinator, provided that he/she has attended 75% of the classes held in the semester. The Head of the Department may grant 'I' grade on his request under intimation to the Academic section. A second examination shall be held normally within 10 days of the last day of EoSE to convert 'I' grade to proper letter grade not exceeding 'B'. Under special circumstances, due to which the student is unable to be present in the Institution for taking the second examination during ten days period following the last day of the EoSE, the Dean of School on the recommendation of the concerned Head of the Department, may extend the period for conversion of 'I' grade as mentioned above, to the first week of the next semester.

### "W" Grade

This refers to withdrawal from a course as per following provision: A student who wants to withdraw from a course shall apply, through the Head of the

Department, to the Dean of School on a prescribed form within one week from the end of the first IA test if advised by his/her Course Coordinator (the teacher in charge of the course; if a course is offered by more than one teacher, one of them will be designated as the course coordinator). If his request for withdrawal is granted, it will be recorded in the registration record of the student and the concerned Course Coordinator will be informed about the same. Such a student shall bel awarded a withdrawal (W) grade at the end of the semester.

#### "X" Grade

This grade is awarded for incomplete Project work and will be converted to a regular grade on the completion of the Project work and its evaluation.

- (10) Project evaluation and the award of 'X' Grade. A student is required to carry out a Project and submit project report as per requirement of his course. A student who is unable to complete his/her project shall be awarded an 'X' grade on the recommendation of an Evaluation Committee constituted by the Vice-Chancellor. The student concerned shall have to present his/her work to the Evaluation Committee latest by 4 weeks before the beginning of the next semester. An 'X' grade shall be awarded to a candidate under the circumstances described below and on being awarded 'X' grade, he/she shall be required to formally register for the next semester and pay fees as prescribed by the University. 'X' grade will be awarded in exceptional circumstances only when the submission of the project report is beyond the control of the student, on the recommendation of his/her supervisor. Normally, the following shall be the grounds for the award of 'X' grade:
- (a) medical grounds; and
- (b) technical reasons

(11) A student obtaining 'D' or a higher grade in a course shall be deemed to have earned the credits allotted to that course.

(12) The overall performance of a candidate in a semester shall be evaluated in terms of Semester Grade Point Average (SGPA) given by:

(13) A student shall be eligible to be promoted to a next higher semester on securing not less than 40 % of the total credits allotted to all the courses for which the student has registered in that semester excluding the audit courses.

(14) A student shall be eligible for the award of a degree only on obtaining a pass grade all the courses prescribed for a program leading to such degree.

(15) The overall performance of a candidate in a programme shall be evaluated in terms of Cumulative Grade Point Average (CGPA) given by:

# **Student Discipline**

(University Ordinance 47'Section 6(xxii), Statute 28(1))

Each student is expected to maintain a very high standard of discipline and show respect to the teachers, be very cooperative with the fellow students and become brand ambassadors to the Society.

- 1. Discipline includes the observance of good conduct and orderly behaviour by the students of the University;
- 2. The following and such other Rules as framed by the University from time to time, shall strictly be observed by the students of the University;
- 2.I Every student of the University shall maintain discipline and consider it his/her duty to behave decently at all places;

2.II No student shall visit places or areas declared by the University as "Out of Bounds" for the students;

2.III Every student shall always carry on his/her Identity Card issued by the competent authority;

2.IV Every student, who has been issued the Identity Card, shall have to produce or surrender the Identity Card, as and when required by the University;

2.V Any student found guilty of impersonation or of giving a false name shall be liable to disciplinary action;

2.VI The loss of the Identity Card, whenever it occurs, shall immediately be reported in writing to the competent authority; and

2.VII If a student is found to be continuously absent from classes without information for a period of 15 days in one or more classes, his/her name shall be struck off the rolls. He/she may, however, be readmitted within the next fortnight by the Dean on payment of the prescribed readmission fee etc. He/ she will not be readmitted beyond the prescribed period.

### 3 Indiscipline shall include:

3.1 Irregularity in attendance, persistent idleness or negligence or indifference towards the work assigned;

3.2 Causing disturbance to a Class or the Office or the Library, the auditorium and the Play Ground etc.;

3.3 Disobeying the instructions of teachers or the authorities;

3.4 Misconduct or misbehaviour of any nature at the time of elections to the student bodies or at meetings or during curricular or extracurricular activities of the University;

3.5 Misconduct or misbehaviour of any nature at the Examination Centre;

3.6 Misconduct or misbehaviour of any nature towards a teacher or any employee of the University or an} visitor to the University; '

3.7 Causing damage, spoiling or disfiguring to the property/ equipment of the University;

3.8 1nciting others to do any of the aforesaid acts;

3.9 Giving publicity to misleading accounts or rumour amongst the students;

3.10 Mischief, misbehaviour and for nuisance committed by the residents of the hostels;

3.11 Visiting places or areas declared as 'out of bounds' for the students;

3.12 Not carrying the Identity cards issued by the Proctor;

3.13 refusing to produce or surrender the Identity Card as and when required by Proctorial and other Staff of the University;

3.14 Any act and form of sexual harassment, tagging or discrimination on the basis of caste, category, religion, race;

3.15 Engaging in unlawful activities that includes membership of banned organizations, organizing meetings and processions without due permission of the competent authorities; and

3.16 Any other conduct anywhere which is considered to be unbecoming of a student.

4 Students found guilty of breach of discipline shall be liable to such punishment, as prescribed below:

(1) Fine

- (2) Campus Ban
- (3) Expulsion and
- (4) Rustication

However, no such punishment shall be imposed on an erring student unless he/she is given a fair chance to defend himself/herself. This shall not preclude the Vice-Chancellor from suspending an erring student during the pendency of disciplinary proceedings against him/her.

5 All powers relating to discipline and disciplinary action in relation to the student shall vest in the Vice-Chancellor. However, the Vice-Chancellor may delegate all or any of his powers as he deems proper to the competent authority or to the Discipline Committee as the case may be or any functionary of the University.

6 (1) Without prejudice to Section 11(5) and also Statute 28(1), there shall be a Discipline Committee comprising of the following members:

a. Vice-Chancellor's nominee or Pro-Vice-Chancellor

b. Dean Students' Welfare

c. Deans of the Schools

d. Warden, who shall be invited, when the matter concerning his/her Hall of Residence is required to be placed before the Committee for consideration e. Proctor (Member/Secretary)

ii. Subject to any powers conferred by the Act and the Statute on the Vice-Chancellor, the Committee shall take cognizance of all matters relating to discipline and proper standards of behaviour of the students of the University and shall have the powers to punish the guilty as it deems appropriate.

iii. The said Committee shall, make such Rules as it deems fit for the performance of its functions and these Rules and any other Orders under them shall be binding on all the students of the University.

iv. The recommendations of the Discipline Committee shall be submitted to the Vice-Chancellor whose decision will be final and binding. However, the Vice-Chancellor, if he is of the opinion that the case merits review, may refer the case back to the Discipline Committee for reconsideration.

v. Appeal against the decision of the Vice-Chancellor will be dealt in accordance with the provisions of Section 34 of the Central Universities Act 2009.

vi. One/third of the total members shall constitute the quorum for a meeting of the said Committee.

### **Avoid Plagiarism**

Plagiarism means presenting another person's ideas, work, copying or reproducing the work without due acknowledgment of the source. Work submitted for assessment may also be regarded as plagiarized where significant portions of an assignment have been reproduced from the work of another student. Hence, the students are advised to not to resort to plagiarism in their work. The Central University of Rajasthan is opposed to and will not tolerate plagiarism

# **Academic Honesty**

The role of the Central University of Rajasthan is to create, preserve, transmit and apply knowledge through teaching, research and creative works. The university is committed to academic excellence and high standards of ethical behaviour as the corner stones of scholastic achievement and quality assurance. The university requires all students to act honestly, ethically and with integrity in their dealings with the university employees, the other students and public.

### Sexual Harassment

Central University of Rajasthan strives to provide a place of work and study free of sexual harassment, intimidation or exploitation. Where sexual harassment is found to have occurred, the University will act to stop the harassment, prevent its recurrence, and discipline and/or take other appropriate action (as per the university ordinance 21 sensitization, prevention and redressal of sexual harassment, Act Section 28(n)) against those responsible. Reports of sexual harassment are taken seriously and will be dealt with promptly.

# Anti/Ragging

Any disorderly conduct whether by words spoken or written or by an act which has the effect teasing, treating or handling with rudeness any other student, indulging in rowdy or undisciplined activities which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear of apprehension thereof in freshers' or junior students or asking the students to do any act or perform something which suc students will not do in the ordinary course and which has the effect of causing or generating a sense of shame or embarrassment so as to adversely affect the physique or psyche of a fresher or a junior student.

The Central University of Rajasthan is opposed to and will not tolerate tagging. All cases of tagging will be strictly dealt with as per provision under ORDINANCE 22 Curbing the Menace of Ragging in Higher Educational Institutions (Act Section 28 (n). You may use 24x7 Anti Ragging Helpline, Toll free No. 1800-180-5522 or Email, helpline@antiragging.net.

# Financial Aid/ Assistance

- Single Girl Child Scholarship of Rs. 1000/, per month by UGC (Government of India)
- ST /SC Scholarships (Government of Raj asthan)
- "The eligible SC/ST, OBC, PWD students, etc. should submit their Scholarship Form for the Academic Year by February for processing Scholarship to SC/ST, OBC, PWD, etc. each year." (Attn.: Webadmin - the same may be uploaded on the University Website also)
- Scholarship of Rs. 1000/- per month to first three students in merit (CUCET-2012) admitted to any programme by Central University of Rajasthan for the first year. The subsequent semester results will determine the students' eligibility for these scholarships in the following semesters.
- Students admitted to M. Tech/MArch. with valid GATE Score get MHRD Scholarship
- Post-Graduate Merit Scholarship for University Rank Holders at Undergraduate
- Amount of Rs. 2000/- per month by UGC (Government of India)

- Post -Graduate Scholarship for selected SC/ST candidates of Rs. 5000/per month (M.Tech.) and Rs. 3000/- per month for other professional courses.
- PhD scholars Who do not get JRF get the UGC fellowship.

# Student Adviser

Every student admitted to any programme of the university will have a faculty member from the concerned department as his advisor (called 'student advisor'). The student advisor will track and monitor the student's regularity in the class room attendance, performance in tests and in completing other assignments in all the courses the student is required to pursue. Based on the assessment of the student's progress and conduct he will be suitably advised and guided so as to ensure that the student remains focused on his primary academic objective. Problems due to any extra ordinary situation will be discussed with the Head and resolved at the department level. Every student will keep in touch with his advisor and meet him periodically, as prescribed by the advisor, and strive to improve his/her performance. A student may also seek advice regarding appearance at the professional examination and participation in outside seminars and other co/extra/curricular activities in a way that does not affect his primary objective.

### Transparency

It is the policy of the University that all processes, including evaluation at various stages will be fully transparent. The answer scripts of all tests and EOSE are shown to the students on the stipulated date announced by the concerned departments and shortcomings in the answers are pointed out and guidance is given for improving future performance. A student on his/her own can seek guidance for improvement in performance from the teacher in/charge of the particular course.

# **Summer Internship/ Internships**

In order to retain the focus of the students on the academic programmes and to compliment it with relevant work experience, during the two/month long summer break, the university has introduced a scheme of internship/summer training for all the students. The main objective is to provide an edge to the students to ensure better placement opportunities for them on completion of their degrees. This will also give a feel for the work environment in organizations of the type they would possibly be associated in their professional careers. During the last three years, the organizations facilitating internship/summer training covered a broad spectrum of the industry, government, academic institutions, research institutions health institutions, regulatory bodies, NGOs, media etc.

The department, in association with the facilitating organization, will be monitoring the work and regularity of the internees. It is also proposed to take feedback from the students after completion of their internship to increase the effectiveness of the scheme.

A report not exceeding two pages is expected to be received from each student outlining the work carried out by him/her during internship/summer training. The department may organize a presentation session internally to assess the quality, relevance and utility of internship/summer training provided.

### **Communication with University Authorities**

Any communication, routine or otherwise, with the University Authorities should be routed through the respective Head of the Department only. **No student should, under any circumstances send a letter or e-mail to the university authorities directly**. The respective head of the departments may take a disciplinary action for any violation by a student in this respect.



# Academic Calender

### Tentative Academic Calendar Odd Semester 2018 – 2019

Sl.	Activities	Dates
No.		
1	Admissions, Counseling and	18th June - 13th July 2018 (New
	Registration	Students)
		2nd – 6th July 2018 (Old Students)
2	Orientation & Commencement of	9th July 2018 (Old Students)
	Classes	
		16th - 17th July 2018 (New 5 Years
		Int. Programme Students)
		18th - 19th July 2018 (Other New
		PG Programme Students)
		20th July 2018 (New Research
		Scholars)
3	Last Date for Course Registration	31st July 2018 (Tuesday)
	& Payment of Fee	
4	Students' Council Election	13th Aug 2018 (Monday)
	(Tentative)	
5	Internal Assessment (IA)	10th - 14th Sept 2018(Monday -
		Friday)
6	Convocation	2 <sup>nd</sup> Nov 2018 (Friday)
7	Mid Semester Break	5th – 9th Nov 2018 (Mon – Fri)
8	Completion of Teaching/Practical	23rd Nov 2018 (Friday)
9	Students feedback	19th – 23rd Nov 2018 (Mon – Fri)
10	End of Semester Examination	26th Nov - 07th Dec 2018 (Mon -
	(EoSE)	Fri)
11	Showing of EoSE-Dec. 2017	On or before 12th Dec 2018 (Wed)
	Answer Books	
12	Submission of Results by	17th Dec, 2018 (Monday)
	Departments to CoE	
13	Winter School / Courses	10th - 21 st Dec 2018 (Mon - Fri)
14	Winter Vacation	24th Dec 2018 - 28th Dec 2018
		(Monday – Friday)

### Tentative Academic Calendar Odd Semester 2018 – 2019

Sl.	Activities	Dates
No.		
1	Registration for all students	31st Dec to 1st Jan 2019
		(Thrs - Fri)
2	Commencement of classes	02 nd Jan 2019 (Tuesday)
3	Last Date for Course Registration &	11th Jan 2019 (Friday)
	Payment of Fee	
4	Internal Assessment (IA)	18th - 22nd Feb., 2019 (Mon
		- Fri)
5	Mid Semester Break for students	18th – 22nd March 2019
		(Mon – Fri)
6	Completion of Teaching/Practical	26th April 2019 (Friday)
7	Students feedback	22nd – 26th April 2019
		(Mon – Fri)
8	End of Semester Examination (EoSE)	29th April – 10th May 2019
		(Mon – Fri)
9	Showing of EoSE - May 2019 Answer	On or before 15th May,
	Books	2019 (Wednesday)
10	Submission of Results by Departments to	20th May 2019 (Monday)
	СоЕ	
11	Issue of Provisional Certificate	3 rd June 2019 onwards
12	Summer Vacation	20th May - 21 st June 2019
		(Mon – Fri)

### **About Library**

The University Library is a central facility to support the teaching and research activities of the University The library has been, over the years successfully catering to the information needs of all the academic community teachers, research scholars and students of Sciences, Social Sciences, Humanities, Performing Arts, Fine Arts, Communication and Management Studies.

The library has a collection of more than 7000 books. Library subscribes following periodicals, popular magazines Est newspapers in English and Indian languages.

The library also has 10 mbps UGC-INFONET connectivity. The library is open from 9:00 a.m. to 8:00 pm on all working days

- 1. Current Science
- 2. University News Communication
- 3. Economic and Political Weekly
- 4. Applied Mathematics Letters
- 5. Proceedings: Mathematical Sciences
- 6. Resonance
- 7. Journal of Actuarial

8. Journal of Actuarial Society of India Studies

9. Sankhya

10. Journal of the Indian Statistical Institute

11. IEEE SystemsJournal

12. Journal of Computers and Systems Sciences

13. Foundations and Trends in Databases 14. Journal of Network and Computer

- 15. Scandinavian Actuarial Journal
- 16. Journal of Applied probability
- 17. Journal of Economics

18. Insurance Mathematics and Economics

19. International Journal of Post Colonial

20. Journal of Commonwealth Literature

- 21. Modern Drama
- 22. Modern Fiction Studies
- 23. Journal of Literary Theory

24. Harvard Business Review South Asia

- 25. IndianJournal of Training &r Development
- 26. Vikalpa (Academic)
- 27. Global Business Review
- 28. Journal of Human Values
- 29. Journal of Entrepreneurship

30. Indian Journal of Public Administration

- 31. Indian Journal of Finance
- 32. Indian Journal of Marketing
- 33. Express Computer
- 34. Digit
- 35. Date Quest
- 36. PC Quest
- 37. Computer Today
- 38. The Economist
- 39. Frontline
- 40. India Today (English)
- 41. India Today (Hindi)
- 42. Business and Economy
- 43. Yojana
- 44. Outlook
- 45. Times of India
- 46. Economic Times
- 47. The Financial Times
- 48.Hindustan Times
- 49. DNA
- 50. Rajasthan Patrika
- 51. Dainik Bhaskar



### **Hostel Accommodation & Other Facilities**

The Central University of Rajasthan has planned to provide hostel facility for all the students admitted to different programmes. However, the University reserves the right of allotment of hostel rooms and other facilities and it is not a matter of right for a student to claim accommodation in the University hostels. Each student who has taken hostel admission needs to abide by the hostel rules, failing which his/her admission to the Hostel will be withdrawn. Students residing in the hostel are required to take active part in running the Hostel Mess and in the payment of Mess Bill before the due date every month. Apart from the Hostel Mess, the students can have their food from the University Canteen in the campus.



Both the boys' and the girls' hostels have well/equipped gym, which will be open for the residents of the hostel during specific timings. The students are required to sign a register kept at the entrance of the gym before using the facility. It is the responsibility of the students to take care of the exercise machines and report to the concerned authority, in case of any misuse/damage to the equipment in the gym. The hostel residents will have access to 24 hour high speed internet access through Wi-Fi facility. The students are required to fill up a form and submit it at the Server Room in the academic building to get a username and password, which would enable the student to make use of this facility. Students are advised not to open any unsuitable sites as their activity will be under continuous scrutiny and henceforth such internet sites will be blocked.

The University provides transport facility to the students from the Campus till Bandar Sindri Chowk and back on all weekdays. On Sundays, the University Bus provides transportation from the Campus till Kishangarh and back. The students are advised to get permission from the concerned authority in case they need the vehicle during any emergency. The University has appointed a Medical Officer who is available throughout the day in the campus for any health related problems of the students. In severe cases, the University takes care of the students by sending them either to Kishangarh hospital or Marble City Hospital. In all respects, the University ensures a pleasant stay in the Campus.



### **Students Corner**

### NSS cell at University level

The National Service Scheme covers students at the level of higher education. Thus the administrative structures of the higher education have the responsibility of looking after NSS and its implementation at the university level. The successful functioning of NSS cell at University level will give impetus for proper implementation of NSS in the unit level.

The overall aim of National Service Scheme as envisaged earlier, is to give an extension dimension to the higher education system and orient the student youth to community service while they are studying in educational institution. The educated youth who are expected to take the reins of administration in future are found to be unaware of the problems of the village/slum community and in certain cases are indifferent towards their needs and problems.

Therefore it is necessary to arouse the social conscience of the students, and to provide them an opportunity to work with the people in the villages and slums. It is felt that their interaction with the common villagers and slum dwellers will expose them to the realities of life and bring about a change in their social perception.



### Two Years Masters Programme (M.Sc / M.A) in Digital Society Central University of Rajasthan

The academic program M. Sc./M.A. (Digital Society) has been started under the department of Society-Technology Interface under the School of Social Sciences from session 2018-2019. The following faculty members are engaged in the department of Society-Technology Interface:

### About the faculty



Prof. Nagendra Ambedkar Sole

**Designation**: Professor & Dean (School of Social Sciences)

**Qualification**: M.A (Political Science), M.Phil (University of Hyderabad), Ph.D. (Osmania University)

**Area of interest**: Local Governance (Panchayati Raj), Rural Development, Indian Government and Administration, Public Policy, Distance Education. Email-ID: <u>snambedkar@curaj.ac.in</u>



Dr. Gyana Ranian Panda

Designation: Assistant Professor & Co-ordinator

**Qualification**: Masters in Political Science (Utkal), M. Phil, and Ph. D from lawaharlal Nehru University (JNU), UGC-NET.

**Area of Interest**: Public Policy, Governance, Study of Government Finances, Big Data and Public Policy, Digital Governance, Climate Change, Energy Policy, Water and Sanitation Policies. Email ID: <u>gyana\_pplg@curaj.ac.in</u>



Dr. Mandar Vijay Kulkarni Designation: Assistant Professor Qualification: Ph.D Nagoya University, Graduate School of International Development (Nagoya, Japan) Areas of Interest: ICT, Cyber Policy, International Development, Research Methodology Email ID: mandar.kulkarni@curaj.ac.in



Mr. Swayam Prakash

**Designation**: Assistant Professor

**Qualification**: B.Tech, Computer Science and Engineering, Maulana Abul Kalam Azad University of Technology, West Bengal, Kolkata; M.Tech, Artificial Intelligence, University of Hyderabad, Hyderabad **Areas of Interest**: R. Python, SAS, Hadoop, Big Data Analytics in Science and Social Sciences

Email ID: swayamprakash@curaj.ac.in



Mrs. Sangeeta Kumari **Designation**: Academic Associate **Qualification**: M.A. Museology, National Museum Institute of History of Art, Museology and Conservation, New Delhi (2007); B.A. History (Hons.), University Of Delhi, New Delhi, (2004); UGC-NET

**Areas of Interest**: Heritage and Museums, Cultural Studies, Folk and Tribal Art, Conservation of Art, Audio-Visual Archiving **Email ID**: sangeeta.kumari@curaj.ac.in

#### About the Programme

The Central University of Rajasthan in collaboration with International Institute of Information Technology – Bangalore (IIIT-B) will be starting Two-year Masters Programme in Digital Society with effect from Academic Year 2018-19, similar to the one being offered at IIITB. The programme introduces to the students from diverse educational backgrounds the academic inter-linkages between the two advanced streams of knowledge-Science and Technology and Social Sciences for better career opportunities and staying competitive.

### Students' intake in the Programme: 20

### **Programme Objectives**

- The Two Years Masters in Digital Society would fulfill the following objectives:
- To help the students to appreciate and understand the digitization ideas, tools and technologies from the perspectives of society at large.
- To enable students to think innovative and generate ICT based solutions intended to address developmental deficits and challenges in the society.
- To help the society to find out ways of strengthening system mainly to counter the laggards performances in the social and economic sectors of the economy.
- To engage in evidenced-based policy-making process and advocates for deployment of digital technologies for the effective policy-implementation process.
- To promote and enrich interdisciplinary research on the digital society by interlinking ICT and Social Sciences.

#### Academic Entry Requirements

- The Two Years Masters in Digital Society is open to candidates with a Graduate degree (Three Years) in any disciplines from recognized University possessing minimum of 55% marks. Those expecting to graduate by June-July 2018 may also apply. The Graduate Degree may be in any of the following areas: Sciences, Social Sciences, Arts and Humanities, Computer Sciences, and Engineering.
- Relevant work experience (an added advantage, but not mandatory).

#### Admission Process

• Applicants must pay a non-refundable application fee as decided by the University in time to time for applying to Masters Programme in

CURAJ through CUCET. This will be conducted through CUCET examination

- The CUCET examination will test numerical / quantitative, analytical, and verbal abilities, as well as design, social, and information technology awareness.
- The selection process includes the entrance examination of CUCET score and the personal interview (if required by the University) for the induction of students to the Master's Programme.
- Other scores (if applicable) as suggested by IIIT-B for the admission will be considered for the admitting students to the programme. However this is subject to approval of University.
- The admission criteria, tuition fees and other fees for the programme will be administered by rules and regulations as approved by the academic / administrative bodies of the University.
- The fees structures for the Programme will be at par with the fees structures applicable in M.Sc in Big Data Analytics.
- A student admitted to one institute will be governed by all the rules and regulations existing at that institute.
- In case of the vacant seats in the Programme, both IIIT-B and CURAJ will explore the filling of the vacant seats through CUCET.

### Instructions

• The medium of instruction is English and determined by the Ordinances of the University.

#### **Students Exchange Programme**

Under the programme, there is an opportunity for exchange of students enrolled at CURAJ as well as in the M.Sc (Digital Society) Programme in IIIT-B. Such an exchange may happen during second year (Third and / fourth Semester) of the respective Programmes and should confirm to the academic requirements of their respective institutions. In such case, the Institution where a student goes on exchange shall transfer the credit/grade earned by the student to that Institute (Host Institute) where the student was admitted to for appropriate consideration for the award of the Degree. In such case of student exchange programme, the expenses in all respects have to be borne by the concerned student opting for student exchange opportunities.

#### Assessment

The Assessment mode of the Two –Year Masters Programme is determined by the Evaluation process of the University (as per the Ordinance of the University). However in the case of student exchange from CURAJ to IIIT-B and vice-versa, the Assessment rules and regulations of the respective institution will apply.

#### **Resources for the Programme**

The Programme will be operated from the School of Social Sciences. In this case the Faculties from Department of Public Policy, Law and Governance, Department of Economics, Department of Media and Culture Studies, Department of Social Works, Department of Computer Science, Department of Management, Department of Environmental Sciences will be contributing to the course instructions of the Programme.

#### Career

Digitalization is shaping almost all aspects of our professional and working lives. Career opportunities include work as internet researcher, digital media researcher, software development professional, digital consultants, ICT consultants, policy experts, etc. Students passing out from the programme will be working in ICT industries, research organization, private companies, public sector, consultancy services industry, and international organization and also in non-governmental organization. Both the Institutes will conduct combined Placement activities as per the Placement Rules exiting at the respective Institutions.

### Pedagogy

The Two Years Masters programme in Digital Society will consist of Four Semesters and students seeking Master's Degree have to earn required credits from total 84 credits in the course of two years. The followings will be the pedagogy for the Two Years Master's Programme in Digital Society:

- A two weeks preparatory programme (Remedial Training) on Introduction to Digital Society.
- Core Courses and Electives.
- ICT-Lab based learning in first three Semester of the Programme
- Project-based learning.
- Dissertation and Internship.

# The Programme Structure and Course Credits of the Two Years' M.Sc / M.A in Digital Society\* in Central University of Rajasthan

Paper Code	Name of the Courses	Credits
Semester I		
DS 101	Information Technology (IT) and Society	4

[		
DS 102	Recent Trends in Information Technology: Internet,	4
	Web, Mobile, & Cloud Technology	
DS 103	Policy, Governance, and Politics in Digital Era	4
DS 104	Research Methods in Social Sciences	4
DS 105	ICT-Lab - Programming Concepts for Social	4
	Sciences	
<b>Total Credits</b>		20
Semester II		
DS 201	Information Communication Technology Policy	4
	and Regulation	
DS 202	Project Management and Appraisal	4
DS 203	Digital Media	4
DS 204	Cyber Law	4
DS 205	ICT-Lab- Programming Concepts for Social	4
	Sciences	
Total Credits		20
Semester III		
DS 301	ICT & Development	4
DS 302	Elective-1	4
DS 303	Elective -II	4
DS 304	Elective -III	4
DS 305	Elective - IV	4
DS 306	ICT- Lab (Project)	4
Total Credits		24
Semester IV		
DS 401	Internship based Project / Dissertation	20
Total Credits		84

Note \*:

- 1. This Programme Structures and Course Credits are applicable for those students who are admitted to Masters Programme in Digital Society in Central University of Rajasthan.
- 2. Tentative List of Electives from other Departments of the School of Social Sciences is given the programme module. Students can also approach academic departments of other School to get relevant Electives in the Third and Fourth Semester of the Programme.
- 3. Those students of IIIT-B who will opt Central University of Rajasthan in the Students Exchange Programme in the Third and Fourth Semester, they have to follow the course structures and Credit Structures as applicable in Central University of Rajasthan.
- 4. Those Students of Central University of Rajasthan who will opt IIIT-B in the Students Exchange Programme in the Third and Fourth Semester, they have to follow the course structures and Credit Structures as applicable in Central University of Rajasthan.
- 5. Students of both the Institutes can also opt for Courses taught in each other institutes for which the necessary opportunities can be explored

suitably by both the Institutes. The Programme Structure and Course Credits of IIIT-B are as follows (subject to IIIT-B rules and regulations).

### Overview of the curriculum of M.Sc in Digital Society in IIIT-B\*\*

Preparatory Term (2 weeks, 1 course, 2 credits)
Introduction to Digital Societies (Pass/No Pass)
Term 1 (16 weeks, 5 core courses, 18 credits)
Digital Components of a Connected Society (4)
Interface Design for Diverse Populations (4)
Technology and Society (4)
Quantitative Methods (3)
Qualitative Methods (3)
Term 2 (16 weeks, 3 core courses, 1 elective, 16 credits)
Engineering and Management of Large Digital Systems (4)
The Digital and Its Discontents (4)
Information and Communication Technology Policy and Regulation (4)
Elective I (4)
Summer Term (8 weeks, 2 core courses, 6 credits)
Information Management (2)
Project Elective (4)
Term 3 (16 weeks, 4 elective courses+1 seminar, 18 credits)
Elective II, III, IV & V (4x4)
Seminar (2)
Term 4 (26 weeks, 16 credits)
Thesis/Internship (16)
Total Credits 76

Note \*\*: The Details of the Course Curriculum is available with IIIT-B. Students willing to go for Students Exchanges need to check the Curriculum Structures and other details of the Programme from the Coordinator of the M.Sc Programme in IIIT-B

### **First Semester Course Modules**

### DS 101: Information Technology and Society

**Course Outlines:** This course will provide an overview of the major findings to date within several social science disciplines, including communication studies, sociology, anthropology and political science. The course will also introduce the different social science disciplines and theories that address the social implications of Internet and related information and communication technologies. Theories will include social shaping and technological determinism, social network analysis, and medium theory. Through this course, students will have a thorough understanding of the main perspectives and key findings about the social implications of the Internet and other ICT technologies.

#### **Course Contents:**

- 1. Information Technology and Society: An Introduction
- 2. Social Shaping of Technology
- 3. Theories of Society and the Internet
- 4. Globalization and Domestication
- 5. Mobile Phones, the Internet, and Perpetual Contact
- 6. The Presentation of Self Online
- 7. Social Implications of Online Data
- 8. Work & Economic Life Online
- 9. Microblogging among New and Old Media
- 10. The Internet and Democracy
- 11. The Knowledge Society

#### **Readings Lists:**

Baron, Naomi S. Always On: Language in an Online and Mobile World. 2008. New York: Oxford University Press.

Bimber, Bruce (2003) Information and American Democracy: Technology in the Evolution of Political Power. 2003. Cambridge: Cambridge University Press.

Boyd, Danah (204) It's Complicated: the social lives of networked teens. New Haven: Yale University Press.

Castells, Manuel (2009), Communication Power, Oxford: Oxford University Press.

Couldry, Nick (2012), Media, Society, World: Social Theory and Digital Media Practice, Cambridge Polity Press.

Deb, Sagarmay (2014) Information Technology, Its Impact on Society and Its Future Advances in Computing, 4(1): 25-29.

Donner, Jonathan (2015) After Access: Inclusion, Development, and a More Mobile Internet, Cambridge: MIT Press.

Dutton, William (2013), Handbook of Internet Studies, Oxford University Press

Graham, Mark & Dutton, William (2014) Society and the Internet. Oxford: Oxford University Press.

Granka, Laura A. (2010) "The Politics of Search: A Decade Retrospective." The Information Society, 26: 364-74.

Gutmann, Michael (2001), Information Technology and Society, (Student Paper) https://www.zurich.ibm.com/pdf/news/Gutmann.pdf

Havalais, Alex (2008) Search Engine Society. Cambridge: Polity Press.

Hindman, Matthew (2009) The Myth of Digital Democracy. 2009. Princeton, NJ: Princeton University Press.

Jeffrey, Robin Doron, Assa (2013) The Great Indian Phone Book: How the Mass Mobile Changes Business, Politics and Daily Life. 2013. Harvard: Harvard University Press.

Kraut, Robert Brynin, Malcolm Kiesler, Sara (2006) Computers, Phones, and the Internet: Domesticating Information Technology. 2006. Oxford: Oxford University Press.

Licoppe, Christian (2004) Connected<sup>®</sup> Presence: The Emergence of a New Repertoire for Managing Social Relationships in a Changing Communication Technoscape."Environment and Planning D: Society and Space, 22(1): 135-156.

Ling, Rich (2012) Taken for Granted ness: The Embedding of Mobile Communication into Society. Cambridge MA: MIT Press.

Litt, Eden & Hargittai, Eszter (2016) The Imagined Audience on Social Network Sites. Social Media + Society, January-March: 1-12.

Margetts, Helen et al. (2015) Political Turbulence: How Social Media Shape Collective Action. 2015. Princeton University Press.

Marwick, Alice E. (203) Status Update: celebrity, publicity and branding in the social media age. New Haven: Yale University Press.

Meyrowitz, Joshua (1985), No Sense of Place, Oxford: Oxford University Press.

Miller et al. How the World Changed Social Media

Napoli, Philip and Obar, Jonathan (2015) The Emerging Mobile Internet Underclass: A Critique of Mobile Internet Access, The Information Society: An International Journal; 2015: 30:5, 323-334.

Neuman, W. Russell & Bimber, Bruce & Hindman, Matthew & Shapiro, R. Y. and Jacobs, L. R. (Eds). 2011. The Oxford Handbook of American Public

Opinion and the Media. Oxford: Oxford University Press. (Chapter 2: The Internet and Four Dimensions of Citizenship)

Neuman, W. Russell, Howard, Philip N. (2010) The Digital Origins of Dictatorship and Democracy: Information Technology and Political Islam. 2010. Oxford: Oxford University Press.

Neumann, Russell W. (2016)The Digital Difference: Media Technology and the Theory of Communication Effects. Cambridge MA: Harvard University Press.

Norris, Pippa Inglehart, Ronald (2009) Cosmopolitan Communications: Cultural Diversity in a Globalized World. Cambridge: Cambridge University Press.

Prior, Markus, (2007) Post Broadcast Democracy. 2007. New York: Cambridge University Press.

Rainie, Lee and Wellman, Barry. (2012) Networked: The New Social Operating System. Cambridge: MIT Press.

Schroeder, Ralph (2015) A Weberian Analysis of Global Digital Divides", International Journal of Communication.

Schroeder, Ralph (2007) Rethinking Science, Technology and Social Change. Stanford: Stanford University Press.

Schroeder, Ralph (2014) Does Google shape what we know?", Prometheus: Critical Studies in Innovation. 32(2): 145–160.

Silverstone, Roger (eds) (1994) Consuming Technologies, London: Routledge.

Thompson, John B. (2001) The Media and Modernity: A Social Theory of the Media. Cambridge: Polity Press.

Vaidhynathan, Siva (2012) The Googlization of Everything. 2012. Berkeley: University of California Press.

# DS 102: Recent Trends in Information Technology: Internet, Web, Mobile and Cloud Technology

**Course Outlines:** Building on the fundamentals of the technologies, the course will explores the uses and significances of Internet communications with an emphasis on the World Wide Web (WWW) and Cloud technologies. Through the course, Students will develop an understanding of the Internet's underlying technologies and learn how to utilize them as contributing members of the Web community.

#### **Course Contents:**

- Introduction to Internet: Growth of Internet, Owners of the Internet, Anatomy of Internet, ARPANET and Internet history of the World Wide Web, basic Internet Terminology, Net etiquette. Internet Applications – Commerce on the Internet, Governance on the Internet, Impact of Internet on Society – Crime on/through the Internet.
- 2. TCP/IP Internet Technology and Protocol : Packet switching technology, Internet Protocols: TCP/IP, Router, Internet Addressing Scheme: Machine Addressing (IP address), E-mail Addresses, Resources Addresses
- 3. Internet Connectivity : Connectivity types: level one, level two and level three connectivity, Setting up a connection: hardware requirement, selection of a modem, software requirement, modem configuration, Internet accounts by ISP: Telephone line options, Protocol options, Service options, Telephone line options – Dialup connections through the telephone system, dedicated connections through the telephone system, ISDN, Protocol options – Shell, SLIP, PPP, Service options – E-mail, WWW, News Firewall etc.
- 4. Internet Network : Network definition, Common terminologies: LAN, WAN, Node, Host, Workstation, bandwidth, Interoperability, Network administrator, network security, Network Components: Severs, Clients, Communication Media, Types of network: Peer to Peer, Clients Server, Addressing in Internet: DNS, Domain Name and their organization, understanding the Internet Protocol Address. Network topologies: Bust, star and ring, Ethernet, FDDI, ATM and Intranet.
- 5. Services on Internet (Definition and Functions) : E-mail, WWW, Telnet, FTP, IRC and Search Engine
- 6. Electronic Mail: Email Networks and Servers, Email protocols –SMTP, POP3, IMAp4, MIME6, Structure of an Email – Email Address, Email Header, Body and Attachments, Email Clients: Netscape mail Clients, Outlook Express, Web based E-mail. Email encryption- Address Book, Signature File.
- 7. Current Trends on Internet: Languages, Internet Phone, Internet Video, collaborative computing, e-commerce.

- 8. Web Publishing and Browsing: Overview, SGML, Web hosting, HTML. CGL, Documents Interchange Standards, Components of Web Publishing, Document management, Web Page Design Consideration and Principles, Search and Meta Search Engines, WWW, Browser, HTTP, Publishing Tools
- 9. HTML Programming Basics: HTML page structure, HTML Text, HTML links, HTML document tables, HTML Frames, HTML Images, multimedia.
- 10. Interactivity Tools: ASP, VB Script, JAVA Script, JAVA and Front Page, Flash
- 11. Internet Security Management Concepts, Information Privacy and Copyright Issues: Overview of Internet Security, Firewalls, Internet Security, Management Concepts and Information Privacy and Copyright Issues, basics of asymmetric cryptosystems.
- 12. Introduction to Cloud: Virtualisation Concepts; Cloud Fundamentals; Cloud as laaS; Setting up your own cloud and future directions

#### **Reading Lists:**

B. Patel & Lal B. Barik, " Internet & Web Technology ", Acme Learning Publishers

D. Comer, "The Internet Book", Pearson Education, 2009.

Godbole AS & Kahate A, "Web Technologies", Tata McGrawHill,2008.

Greenlaw R and Hepp E "Fundamentals of Internet and www" 2nd EL, Tata McGrawHill,2007.

Ivan Bayross, "HTML, DHTML, JavaScript, Perl CGI", 3rd Edition, BPB Publications.

Jackson, "Web Technologies", Pearson Education, 2008.

Leon and Leon, "Internet for Everyone", Vikas Publishing House.

M. L. Young,"The Complete reference to Internet", Tata McGraw Hill, 2007.

#### DS 103: Policy, Governance, and Politics in Digital Era

**Course Outlines:** In the digital era, Policy, Governance, Politics, Political institutions, activities and relationships are increasingly mediated and shaped by the technologies of information and communication. This paper examines the impact of the Internet and related technologies on the core activities and institutions of government and politics and considers whether the developing use of these technologies serves to reinforce, undermine or otherwise alter traditional political models or patterns of behaviour.

#### **Course Contents:**

- 1. Public Policy: Public and policy as concepts; Policy Analysis : meaning and scope; Putting Policy as Public Agenda; Policy Cycle; Agenda Setting Process; Evidence-based policy making; Policy evaluation. Policy Analysis: Meta-Analysis; Meso-Analysis; Decision Analysis; Delivery Analysis; Evolution of the concept of Governance, Horizontal and Vertical networks; Types of Governance; Approaches of Governance; the concept of Governability; New Public Management and Its Critique; Public Sector Reforms; Transparency and Accountability.
- 2. Governance: Basic e-Governance: Policies, Strategies and Frameworks; Information Society Concepts and Principles; Introduction to ICT and e-Governance; Business Information Systems; Government Process Re-engineering(GPR); Towards good governance through E-governance; Introduction to e-Democracy
- 3. E-governance Architecture: Planning and Implementing e-Governance; Legal Framework of e-Governance; Enterprise Business Architecture Development; Public Management and Administration; Business Models for Implementation of e-Governance; Change Management and Capacity Building in e-Governance Projects; Data System Infrastructural preparedness. E-Governance Technologies
- 4. E-Governance Product and Services in India supported by NIC: Overview of National e\_Governance Plan(NeGP) , e-POST, AGMARKNET ,Examination Results Portal , Gyandoot e-Governance Project, UDAI, AADHAR, JUDIS, Indian Passport portal, RuralBazar, Value Added Tax (VAT)
- 5. Politics: Introduction to Digital Government; Development of E-Government, The State and E-Government Regimes, The nature of politics and democracy in the digital era (E-Democracy), Digital citizenship and political (in)equality, Political representation, Political communication, agenda setting and public opinion
- 6. Political Institutions and Processes: E-Parliament, E-Legislature and E-Rulemaking, Formal processes of political participation: parties, campaigns and elections (E-Politics and E-Campign), Civic engagement and civil society, Digital-era government and bureaucracy, Good Governance and Open Government, The digital nation state

#### **Reading Lists:**

Barber, Benjamin R. (1998) Three Scenarios for the Future of Technology and Strong Democracy. Political Science Quarterly 113 (4): 573–89.

Beetham, David (1994) Defining and Measuring Democracy. ECPR Sage Modern Politics Series Volume 36. London: Sage. Especially Chapter 2 by David Beetham

Bennett, W. L. and Iyengar, S. A New Era of Minimal Effects? The Changing Foundations of Political Communication. Journal of Communication, 58: 707–731. doi:10.1111/j.1460-2466.2008.00410.x

Bennett, W. Lance, and Alexandra Segerberg (2013) The Logic of Connective Action: Digital Media and the Personalization of Contentious Politics. Cambridge University Press.

Bimber, Bruce A. Information and American Democracy: Technology in the Evolution of Political Power. Communication, Society, and Politics. Cambridge, UK: Cambridge University Press.

Boulianne, S. (2009) —Does Internet Use Affect Engagement? A Meta-Analysis of Research, in Political Communication, 26(2) p. 193-211.

Burns, K. L Schlozman, S. Verba (2001) The Private Roots of Public Action

Calhoun, Craig. (1998) Community without Propinquity Revisited: Communications Technology and the Transformation of the Urban Public Sphere.ll 1998. Sociological Inquiry 68 (3): 373–97. doi:10.1111/j.1475682X.1998.tb00474.x.

Chadwick, Andrew (2006)Internet Politics: States, Citizens and New Communication Technologies. 2006. Oxford: Oxford University Press.

Chadwick, Andrew Howard, Philip N. (2008)Handbook of Internet Politics. London: Routledge.

Coleman, Stephen and Blumler, Jay (2008). The Internet and Democratic Citizenship. Cambridge University Press. Chapter 3.

Colomer, Joseph M. (2010) Political Science. Oxford: Oxford University Press.

D. Harp & M. Tremayne (2006) The Gendered Blogosphere: Examining Inequality using Network and Feminist Theory Journalism & Mass Communication Quarterly 83: 247

Dahl, Robert A.(1989) Democracy and its Critics. 1989. New Haven: Yale University Press.

Dahlberg, L. (2011) Reconstructing Digital Democracy: An outline of four —positions.' New Media and Society, 13 (6) 855-872.

David S. Morris & Jonathan S. Morris (2013) Digital Inequality and Participation in the Political Process: Real or Imagined? Social Science Computer Review

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Jackson, Nigel and Lilleker, Darren (2011) Microblogging, Constituency Service and Impression Management: UK MPs and the Use of Twitter, 2011, Journal of Legislative Studies, 17(1), 86-105

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M.J. Stern & B.D. Rookey (2013) The politics of new media, space and race: A socio-spatial analysis of the 2008 presidential election. New Media and Society 15 (4) 519-40

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Neuman, W.R., Bimber, B. & Hindman, M. (2011) The Internet and Four Dimensions of Citizenshipl in Jacobs, L.R., & Shapiro R.Y. (2011) The Oxford Handbook of American Public Opinion and the Media.

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Noveck, Beth (2009) Wiki Government, Washington: Brookings Institution Press.

O'Reilly, T. (2011) Government as a Platform', Innovations 6(1) pp. 13-40 MIT Press)

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R. Gibson & M. Cantijoch (2013) Conceptualizing and Measuring Participation in the Age of the Internet: Is Online Political Engagement Really Different to Offline?, Journal of Politics 75 (3) 701-716

R.J. Dalton Citizen Politics: Public Opinion and Political Parties in Advanced Democracies, chapter 4 (2008 edition)

S. Levmore & M.C. Nussbaum (2012) The Offensive Internet: Speech, Privacy and Reputation. Chapter by Nussbaum

Schlozman, K.L., Verba, S. & Brady, H.E. (2010) Weapon of the Strong? Participatory Inequality and the Internet in Perspectives on Politics 8 (2): 487-509

Schmitter, P. C. & Karl, T.L. (1991)What Democracy is...and Is Not. Journal of Democracy, 2(3): 75-88.

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Song, Hyunjin, and William P. Eveland Jr. (2015) The Structure of Communication Networks Matters: How Network Diversity, Centrality, and

Context Influence Political Ambivalence, Participation, and Knowledge.ll 2015. Political Communication 32 (1): 83–108. doi:10.1080/10584609.2014.882462.

Sunstein, Cass R. Republic.com 2.0. 2007. Princeton, NJ: Princeton University Press. (Chapter 1)

Vesa, Juho, Helena Blomberg, and Christian Kroll (2015) Minimal and Massive! Politicians' Views on the Media's Political Agenda-Setting Power Revisited. The International Journal of Press/Politics, March, 1940161215575391. doi:10.1177/1940161215575391

Wells, Chris (2015) The Civic Organization and the Digital Citizen: Communicating Engagement in a Networked Age. New York, NY: Oxford University Press.

#### DS 105: Research Methods in Social Sciences

**Course Outlines:** Digital Social Research: Methods Core provides students with the opportunity to engage with the basic methodological underpinnings of quantitative and qualitative social science research practices in the context of Internet studies. This includes material on research designs and the development of research questions and empirical approaches across multiple methods. Students explore traditional social research methods that can be applied to the study of the Internet and related information and communication technologies (ICTs), but with an emphasis on emerging social research tools that can be applied to social research in digital spaces. They are introduced to all steps of research in ways that they can understand the inter-relationships across all phases of the research process.

#### **Course Contents:**

- 1. Introduction to Methods in Internet Research
- 2. Asking & Developing Research Questions
- 3. Scientific Research Methods
- 4. Research Designs, Sampling, & Experimental Approaches
- 5. Interpretive Methods
- 6. Delphi Techniques
- 7. Survey Research
- 8. Modeling in the Social Sciences & the Internet
- 9. Ethics of Internet Research
- 10. Distributions and their description: Descriptive statistics and graphics.
- 11. Social statistics and statistical software
- 12. Probability and sampling distributions: Introduction to probability. Sampling distributions. Central limit theorem. Normal distribution. Binomial distribution.
- 13. Testing hypotheses for 1 variable: Null hypothesis. Confidence intervals. Type I and Type II errors.
- 14. Testing hypotheses for 2 variables: Standard errors. T-tests. Z-tests
- 15. Two-way tables, Percentaging. Interpretation. Independence. Chi-square tests.
- 16. Summarizing bivariate relationships
- 17. Regression: Residuals. Plots for regression. Goodness of fit
- 18. Statistical controls: The elaboration model , Partial tables and partial coefficients

#### **Reading Lists:**

Ackland, R. (2013). Web Social Science: Concepts, Data and Tools for Social Scientists in the Digital Age. London: Sage Publications.

Agresti, Alan Finlay , Barbara (2009) Statistical methods for the social sciences. 4th ed. Essex: Pearson.

Babbie, E. (2009). The Practice of Social Research. Belmont, CA: Wadsworth. (Chapter 4: Research Design, Chapter 7: The Logic of Sampling)

Berry, J.M. (2002). Validity and Reliability Issues in Elite Interviewing. Political Science and Politics, 35(4), 679-682.

Best, S.J. & Krueger, B.S. (2004). Internet Data Collection. SAGE, Quantitative Applications in the Social Sciences. Vol 141.

Collins, R. (1988). What is Statistics: Method or Theory? Theoretical Sociology, 494-511

Couper, M. (2000). Web surveys: a review of issues and approaches. Public Opinion Quarterly, 64(4), 464-494.

Davis, M.S. (1971). That" s Interesting! Towards a Phenomenology of Sociology and a Sociology of Phenonmenology. Philosophy of the Social Sciences, 1, 309-344. Available from: http://www.mang.canterbury.ac.nz/writing\_guide/marketing/index.shtml

Dutton, W. H. (2013). Internet studies: The foundations of a transformative field. In the Oxford Handbook of Internet Studies. Oxford University Press.

Dutton, W.H & Jeffreys P.W. (2010). World Wide Research: Reshaping the Sciences and Humanities. Cambridge: MIT Press.

Elliot M., Purdam, K., & Mackey E. (2013). Data Horizons: New Forms of Data for Social Research. CCSR Report 2013-3 12/6/2013 Manchester: School of Social Sciences, University of Manchester.

Fielding N.G., Lee, R.M., & Blank, G. (2008). The Sage Handbook of Online Research Methods. London: Sage.

Gellner, E. (1985). Relativism and the Social Sciences. Cambridge: Cambridge University Press. (Chapter 4: The scientific status of the social sciences)

Gilbert, N., & Troitzsch, K.G. (2005). Simulation for the Social Scientist, 2nd Edition, Open University Press.

Hargittai, E. (Ed.). (2009). Research confidential: solutions to problems most social scientists pretend

Hothorn, Torsten Everitt, Brian S. (2014) A handbook of statistical analyses in Chapman & Hall.

Huberman, B.A. & Adamic L.A. (1999). Internet: Growth dynamics of the World-Wide Web. Nature, 401, 131.

Knoke, David Bohrnstedt, George W. Mee, Alisa P. (2002) Statistics for social data analysis. Belmont, CA: Thompson.

Morgan, M.S. (2012). The World in the Model: How Economists Work and Think. Cambridge: Cambridge University Press.

Robson, C. (2011). Real World Research, Third Edition. London: Blackwell.

Rule, James B. (1997). Theory and Progress in Social Science. Cambridge: Cambridge University Press. (Chapter 5: Network Analysis; Part 1 & 3)

Sandelowski, M., Voils, C. I., & Knafl, G. (2009). On quantitizing. Journal of Mixed Methods Research, 3(3), 208-222.

Willis. J. (2007). Foundations of Qualitative Research: Interpretive and Critical Approaches. Sage.

#### DS 106: ICT-Lab- Programming Concepts for Social Sciences

**Course Outlines:** The purpose of this course is to familiarize the student with the variety of approaches for processing pre-collected data, a technique colloquially referred to as "data analyzing". Analyzing involves filtering, shaping, and preparing data for analysis. This course covers the application of Python programming to the fields of behavioural and social sciences as ass as building blocks of computers and the Web.

#### **Course Contents:**

- 1. Input / Output / Storage of data as a file.
- 2. Text processing and regular expressions
- 3. Shaping data using iPython
- 4. Unicode, Datetime, Geojson and other special formats
- 5. Training of STATA/SPSS software

#### **Reading List**

McKinney, W. (2013). Python for Data Analysis. Sebastopol, CA. O" Reilly Media.

Bird, S., E. Klein & E. Loper. Natural Language Processing with Python. Sebastopol, CA. O Reilly Media.

## Second Semester Course Modules

#### DS 201: Information Communication Technology Policy and Regulation

**Course Outlines:** The pace of technological change and innovation in the use of information and communication technologies (ICTs) poses significant challenges for policy-makers across a variety of issues, whilst regulation and policy will, in turn, shape the range of choices that can be made about the use, design and development of ICTs. Informed academic study of the network of networks that comprise the Internet must, therefore, be firmly grounded in a sophisticated understanding of the underlying technology and policy contexts in which these networks are embedded. In particular, valuable insights are to be gained by studying policy debates relating to the Internet in the broader context of ICT policy more generally, such that continuity and change can be observed.

#### **Course Contents:**

- 1. History and development of the ICT Policy and Regulation
- 2. Planning in India and ICT
- 3. Policy, Governance and Regulatory Frameworks
- 4. Stakeholders and Policy-making Process; Ministry of Electronics and Information Technology; R& D Institutions in ICT; National Knowledge Networks
- 5. Internet Proliferation and Governance; E-Infrastructures
- 6. Privacy and security
- 7. Content regulation and filtering
- 8. Consumer Protection under Digital age
- 9. Regulatory Responses to Public Debates on Emerging ICTs
- 10. Biometrics
- 11. Digital copyright, patents
- 12. Universal access, universal service and the digital divide, Net Neutrality
- 13. Government Programmes in India: Aadhar, Digital India, Make-in-India, Skills India, Digital Locker, Digitalisation of Socio-economic services
- 14. Information Technology Act 2000 (Amendment 2008); National Policy on Electronics 2012; National E-Governance Plan; National Security Policy 2013; National Policy on Universal Electronic Accessibility.
- 15. ICT and Economic Development; Private Sector regulation; Public Private Partnership

#### **Reading Lists:**

Alestalo ,M .H. (2001) "Is knowledge based society a relevant strategy for civil society" Current Sociology 49, 4: 209

Banzal, S. (2010). Equitable Communication for All: Polices and Regulatory Issues. ITU-APT Foundation, New Delhi.

Bedi, K., P. Singh and S. Sandeep (2001) Government@net: New Governance Opportunities for India. New Delhi, Sage Publications.

Bhatnagar, S. (2000). Enhancing Telecom Access In Rural India: Some Options. Paper presented at India Telecom Conference, Asia-Pacific Research Center, Stanford University.

Bhatnagar, S. and R. Schware (2000) Information and Communication Technology in Development: Cases from India. New Delhi, Sage Publications.

Chopra, A. (2005). Bridging India's Digital Divide: Some Policy and Technological Options. PhD Thesis University of Hohenheim, Stuttgart, Germany.

Chowdhury, S. and Datta, D. (2009). Indian Telecom: Regulation, Spectrum Allocation and Dispute Management. IIMB Management Review.

Dasgupta, S., Paul, R., & Fuloria, S. (2011). Factors Affecting Behavioral Intentions towards Mobile Banking Usage: Empirical Evidence from India. Paper presented in conference.

Dash, S., & Misra, H. (2008). Rural E-governance Model and Its Impact on Decision-Making Process in Agriculture: A Study of ITC's E-Choupal. ASBM Journal of Management, Vol. 1, No. 1, pp. 39-46.

Dreze J. and A. Sen. (2002) India Development and Participation. New Delhi, Oxford University Press.

Edgerton, David, The Shock of the Old: Technology and Global History since 1900

Government of India (various years) Annual Report Ministry of Information Technology. New Delhi, Government of India.

Jain, R. (1993). Review of Policy Changes in the Indian Telecom Sector. Journal of Global Information Management, Vol. 3, pp. 33-45.

Jain, R. (2001). Cellular Licensing In India: Lessons From Experiences. Paper presented in Conference.

Jain, R. (2002). The Internet in developing countries. Journal of Global Information Technology Management, Vol. 5, Iss. 1, pp. 1.

Jain, R. (2005). Accelerating Indian Rural Telecom Services: Policy and Regulatory Approaches. Paper presented in conference.

Jain, R. (2005). Framework for Review of Indian Spectrum Management Polices. Paper presented in conference.

Jain, R. (2006). Challenges for Spectrum Management Policy and Regulation: Learnings in an Asian Context. Paper presented in conference at Group on Telecom Centre for Infrastructure Policy and Regulation.

Jain, R. (2006). Interconnection regulation in India: Lessons for developing countries. Telecommunications Policy, Vol. 30, pp. 183–200.

James, J. (2007). From origins to implications: Key aspects in the debate over the digital divide. Journal of Information Technology, Vol. 22, pp. 284–295.

Khan, M. U. (1987), "Impact Micro Electronics in India," Science and Public Policy 14, 4: 204

Naga, H. (1994) Exploiting Information Technology for Development: A Case Study of India. World Bank Discussion Paper Series 246, Washington DC, World Bank.

Narasimhan R. (2000) "Human Resource Development to meet the challenges of information and communication technologies (ICTs). National Centre for Software Technology (NCST).

Naughton, John A Brief History of the Future: From Radio Days to Internet Years in a Lifetime. 2000. New York: The Overlook Press.

Singhal A. and M.E. Rogers (2001) India's Communication Revolution from Bullock Carts to Cyber Nets. New Delhi, Sage Publications.

Venkat subramanian, K. Approach paper on "India development as knowledge society", Planning Commission, New Delhi.

Zittrain, Jonathan The Future of the Internet - And How to Stop It. 2008. New Haven: Yale University Press.

#### DS 202: Project Management and Evaluation

This paper provides the opportunity to students to develop a systematic understanding of key skills and concepts essential to effective project management. By examining the Project Cycle using real projects, students learn techniques and tools – needs assessment, stakeholder analysis, strategic design, logical framework, monitoring and evaluation, proposal and report writing, budgeting – used in formulating and managing projects for desired impact, while gaining knowledge of and advancing actual project work. By course end, students will also be familiar with aid and development work, its language and terminology, and different project structures, implementation practices, and strategies to address potential conflicts and obstacles.

- 1. Introduction to Project Management, and the Project Cycle
- 2. Needs Assessment Concept Mapping
- 3. Needs Assessment Tools, Methodologies, Stakeholder Analysis
- 4. Project Design and The Logical Framework
- 5. Monitoring and Evaluation: Framework Analysis (World Bank, DFID, UNDP, and other established frameworks)
- 6. Activity-Based Budgeting, and Basic Bookkeeping
- 7. Grant Proposal Writing
- 8. Project Management in Local Government, Innovation in Project Management
- 9. Ethics and Project Management

#### **Readings:**

Clifford F Gray, Erik W Larson – Project Management- A managerial Process, Tata Mcgraw-Hill Publishing Co Ltd

Jack Meredith, Samuel J. Mantel Jr. Project Management- A Managerial Approach-John Welly and Sons

John M Nicholas- Project Management for business and Technology, Prentice Hall of India Pvt. Ltd

James P lewis – Projec Planning, Scheduling and Control, Tata Mcgraw-Hill Publishing Co Ltd

ILO. Project Management and the Environment; An ILO/UNEP Environment Management training programme. Edited by Dr. RGA Boland, ILO, Geneva 1986.

Franked, Ernest G. Project Management in Engineering Services and Development Butterworths, London, 1990.

Govt. of India. The environmental impact assessments notification, 1994. Ministry of Environment & Forest, New Delhi, 1994.

Ludwij, Ernest E. Applied Project Mgt. for the Process Industries, Gulf Publishing Co.; Houston, 1974.

Mattoo, PK. Project formulation in developing countries. The Macmillan Co. of India Ltd., 1978.

Clifton, David S. & Fyffe, David E. Project Feasibility Analysis. A guide to profitable New Ventlar. John Wiley & Sons, 1977.

#### DS 203: Digital Media

**Course Outlines:** The students will explore the basic concepts of new media as well as the role of digital media technologies play in society. Besides, the course will help the students to understand the impacts of new media on communication today.

#### **Course Contents:**

- 1. Overview of online Communication & Internet : Meaning and definition, Features of Online Communication ; Characteristics of internet, Networking, ISP and browsers, Types of websites, Video conferencing, Webcasting, social networking, blogging and micro-blogging ; History of New Media Unit
- 2. New Media: Digital media and communication, ICT; Information Society, New World Information Order and E-governance; Media Convergence; Emerging Trends: Mobile Technology, Social Media & Web 2.0 Network theory; Public sphere; Wikipedia
- 3. Content Journalism: Traditional vs Online Journalism-difference in news consumption; Selection of news content, presentation of news; Online News Writing & Editing, News Portals, Blogs, Chat, Video, Podcasting, live casting and mobile communication
- 4. Laws and Ethics: Cyber Crimes & Security : Types and case studies; WikiLeaks; Cyber Laws & Ethics, Internet censorship in India, Comparison between America and India The student need to submit soft news stories for websites or open individual blogs as a part of project.

#### **Readings Lists:**

LA Lievrouw, S Livingstone, Handbook of new media: Social shaping and consequences of ICTs, Sage 2002

Martin Lister, New Media: A Critical introduction, Routledge, 2009

Flew. Terry, New Media: An Introduction, Oxford Higher Education, 3rd, 2007

Wendy Hui Kyong Chun, Thomas Keenan, 'New media, Old Media, A history and Theory reader, Routledge, 2006

Carolina McCarthy, Facebook: Our targeted ads aren't creepy , The Social-CNET news, June 18, 2009

Levinson. Paul, New New Media, Allyn & Bacon, 2nd, 2012

Lev Manovich, The language of New Media, MIT Press, 2001

Ronal Dewolk, Introduction to Online Journalism, Allyn & Bacon

John Vernon Pavlik, New Media Technology, Allyn & Bacon

Michael M. Mirabito, New Communication Technologies : Application

Barbara . Mogrenstorn, Policy & Impact, Focal Press, 4th edition Xtine Burrough, Paul Martin Lester, Visual Communication on the Web, Routledge, 2012

Richard Kahn, Douglas Kellner, University of California, Los Angeles, USA, 'New media and internet, activism: from the 'Battle of Seattle' to blogging', New Media and Society, Sage 2004.

#### DS204: Cyber Law

**Course Outlines:** This course will introduce legality aspect of the increasing use if ICT in all walks of life. ICT is universally applicable and unbridled growth of technology has raised many legal issues that need to be answered in the existing legal frameworks. With growing dependency, new threats to network and information security have emerged and there is ever-growing vulnerability to Cyber Crime. The paper introduces the students on cyber law frameworks both from India and international perspectives.

#### **Course Contents:**

- **1.** Introduction: Digitization and its Impact in Society; Need for cyber law; Cyber Jurisprudence at International and Indian Level
- 2. International perspectives of Cyber Law: UN & International Telecommunication Union (ITU) Initiatives ; Budapest Convention on Cybercrime; Asia-Pacific Economic Cooperation (APEC) ; Organization for Economic Co-operation and Development (OECD); World Bank; Commonwealth of Nations
- **3.** Human Rights Perspectives of Cyber law: Freedom of Speech and Expression in Cyberspace; Right to Access Cyberspace; Access to Internet; Right to Privacy; Right to Data Protection.
- **4.** Cyber Crimes & Legal Framework: Hacking; Digital Forgery; Cyber Stalking/Harassment; Cyber Pornography; Identity Theft & Fraud; Cyber terrorism; Cyber Defamation; Different offences under IT Act, 2000
- **5.** Dispute Resolution and Legal Jurisprudence on Cyberspace in India; Examination of various cases

#### **Reading List:**

Chris Reed & John Angel, Computer Law, OUP, New York, (2007).

Justice Yatindra Singh, Cyber Laws, Universal Law Publishing Co, New Delhi, (2012).

Verma S, K, Mittal Raman, Legal Dimensions of Cyber Space, Indian Law Institute, New Delhi, (2004)

Jonthan Rosenoer, Cyber Law, Springer, New York, (1997).

Sudhir Naib, The Information Technology Act, 2005: A Handbook, OUP, New York, (2011)

S. R. Bhansali, Information Technology Act, 2000, University Book House Pvt. Ltd., Jaipur (2003).

Vasu Deva, Cyber Crimes and Law Enforcement, Commonwealth Publishers, New Delhi, (2003).

#### DS 205: ICT-Lab

**Course Outlines:** This course covers the advanced application of Python programming to the fields of behavioural and social sciences.

#### **Course Contents:**

- 1. Shaping data using iPython (Advanced)
- 2. Unicode, Datetime, Geojson and other special formats (Advanced)
- 3. Advanced Training of STATA/SPSS software
- 4. Internet-Based Research and Experiments

#### **Reading List**

McKinney, W. (2013). Python for Data Analysis. Sebastopol, CA. O" Reilly Media.

Bird, S., E. Klein & E. Loper. Natural Language Processing with Python. Sebastopol, CA. O Reilly Media.

#### Third Semester Course Modules

### DS 301: ICT and Development

**Course Outlines:** This course will introduce students to the debates and practices surrounding the uses of Information and Communication Technologies (ICTs) in Developmental process in the Global South. It will draw on resources from Anthropology, Development Studies, Economics, Geography, and History in order to examine the theoretical and conceptual frameworks that underpin development - as a practice, as a subject of research, and as a discourse. This course will provide an opportunity to reflect on local appropriateness, social inclusion and the range of arguments for and against any ICT for development project in a variety of contexts.

#### **Course Contents:**

- **1.** Uneven Development and the Origins of ICTD: Unevenness in development; Digital divides.
- **2.** Development Theory: Dependency, modernisation, structuralism, socialism, neo-Marxism and neoliberalism
- **3.** Critiques of ICTD: Feminist, postcolonialist, and poststructuralist critiques
- **4.** Development in the Network Society: Digital divides, Value chain disintermediation and e-commerce
- **5.** ICTs as interventions for social development: The study of MDGs and SDG
- 6. ICTs as interventions for social development, Public Sector Reforms
- 7. Market creation, expansion and inclusion through ICTs, Rural Market Creations; Financial Inclusions and Mobile Money
- **8.** Knowledge economies, technology entrepreneurship and innovation
- 9. Digital labour and Development

#### **Reading Lists:**

Burrell, J. & Toyama, K. 2009. What Constitutes Good ICTD Research? I. Information Technologies & International Development, 5(3): 82-94.

Castells, M., 2003. The Rise of the Fourth World in Held, D. and McGrew, A. (Eds). The Global Transformations Reader. Oxford: Blackwell. pp. 430-439

Crow, B., Zlatunich, N. & Fulfrost, B. 2009, Mapping Global Inequalities: Beyond Income Inequality to Multi-Dimensional Inequalities. Journal of International Development, 21:10511065.

Heeks, R. 2002. i-Development not e-Development: Special Issue on ICTs and Development. Journal of International Development, 14(1): 1-11.

Heeks, R. 2009. The ICT4D 2.0 Manifesto: Where Next for ICTs and International Development? Manchester: Centre for Development Informatics, Working Paper No. 42 (online resource). Ocampo, J. A. & Vos, R. 2008. Uneven Economic Development. London: Zed Books.

Smith, A. (2008). Of the Advantages... in Chari, S. & Corbridge, S. (Eds). The Development Reader. Oxford:Routledge.

Rostow, W. W. (1960). The Stages of Economic Growth: A Non-Communist Manifesto. Cambridge: Cambridge University Press.

Wolf, M. (2008). The Market Crosses Borders in Chari, S. & Corbridge, S. (Eds). The Development Reader. Oxford: Routledge. pp. 401-408

Peet, R., Hartwick, E. (2009). From Kenyesian Economics to Neoliberalism in Theories of Development. New York: Guilford Press, pp. 53-102

Pralahad, C. K & Hammond, A, (2002) Serving the World's Poor, Profitably. Harvard Business Review, 80(9): 48-57.

Frank, A. G. (1966). The Development of Underdevelopment. The Monthly Review 18(4):1731.

Wallerstein, I. (1974) The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis. Comparative Studies in Society and History, 16(4): 387-415.

Schech, S. 2002. Wired for Change: The Links Between ICTs and Development Discourses. Journal of International Development, 14(1): 13-23.

Escobar, A. 2008. The Problematization of Poverty in Chari, S. and Corbridge, S. (Eds). The Development Reader. Oxford:Routledge, pp. 131-140

Ferguson, J. 2008. The Anti-Politics Machine in Chari, S. and Corbridge, S. (Eds). The Development Reader. Oxford:Routledge. pp. 322-332

Peet, R & Hartwick, E. 2009. Poststructuralism, Postcolonialism, and Postdevelopment in Theories of Development. New York: Guilford Press, pp. 197-239

Escobar, A. 1995. Encountering Development. Princeton, NJ: Princeton University Press.

Ishemo, S. L. 2004. Culture & Historical Knowledge in Africa: A Cabralian Approach∥. Review of African Political Economy, 31(99): 65-82.

Mercer, C. 2004. Engineering Civil Society: ICT in Tanzania. Review of African Political Economy, 31(99): 49-64.

Willis, K. 2005. Theories and Practices of Development. London: Routledge

Best, M. L., Kenny, C. 2009. ICTs, Enterprise and Development in Unwin, T. (Ed). Information and Communication Technology for Development. Cambridge: Cambridge University Press, pp. 177-201

Heeks, R. 2007. Using Competitive Advantage Theory to Analyze IT Sectors in Developing Countries: A Software Industry Case Analysis. Information Technologies and International Development, 3(3): 5-34.

Castells, M. 2010. The Rise of the Network Society (2nd Edition). Oxford: Basil Blackwell.

Gereffi, G. 2001. Shifting Governance Structures in Global Commodity Chains, With Special Reference to the Internet. American Behavioral Scientist, 44(10):1616-1637.

Gereffi, G., Humphrey, J., Kaplinsky, R. & Sturgeon, T. 2001. Globalisation, Value Chains and Development.IDS Bulletin, 32(3):1-14.

Graham, M. 2008. Warped Geographies of Development: The Internet and Theories of Economic Development. Geography Compass, 2(3): 771-789.

Keniston, K. 2004. Introduction: The Four Digital Divides in Keniston, K. and Kumar, Deepak. IT Experience in India: Bridging the Digital Divide. London: Sage., pp. 11-36

Molla, A & Heeks, R. 2007. Exploring E-Commerce Benefits for Businesses in a Developing Country. The Information Society, 23(2): 95-108.

Porter, M. E. 2001. Strategy and the Internet. Harvard Business Review, March: 63-78.

Warschauer, M. 2002. Reconceptualizing the Digital Divide. First Monday, 7(1).

Heeks, R. (2010), Do information and communication technologies (ICTs) contribute to development? Journal of International Development, 22: 625–640.

Bailur, S., 2007. Complexities of Community Participation in ICT for Development. Conference paper presented at the 9th International Conference on Social Implications of Computers in Developing Countries, São Paulo, Brazil.

Khan, F. and Ghadially, R. (2010), Empowerment through ICT education, access and use: A gender analysis of Muslim youth in India. Journal of International Development, 22: 659–673.

Blaya, J.A., Fraser, H.S.F. and Holt, B., 2010. E-Health Technologies Show Promise in Developing Countries I. Health Affairs 29, 244–251.

Aminuzzaman, S., Baldersheim, H. and Jamil, I., 2003. Talking Back! Empowerment and Mobile Phones in Rural Bangladesh: A Study of the Village Phone Scheme of Grameen Bank. Contemporary South Asia 12, 327–348.

Dangwal, R., Jha, S., Chatterjee, S., & Mitra, S. (2005). A Model of How Children Acquire Computing Skills from Hole-in-the-Wall Computers in Public Places. Information Technologies & International Development, 2(4), 41–60.

Braund, P., & Schwittay, A. (2006). The Missing Piece: Human-Driven Design and Research in ICT and Development. 2006 International Conference on Information and Communication Technologies and Development (pp. 2–10)

DS 302: Elective I (Any courses from the Syllabuses of 2-Yr MSC (CS) in Big Data Analytics)

DS 303: Elective II (Choice from the list of Electives annexed / or any other Electives offered by the University in various Academic Departments)

DS 304: Elective III (Choice from the list of Electives annexed / or any other Electives offered by the University in various Academic Departments)

DS 305: Electives IV (Choice from the list of Electives annexed / or any other Electives offered by the University in various Academic Departments)

**DS 304: ICT-Lab – Project:** The students are required to submit one project using Pythons and other statistical software addressing one or many problems of digital society.

# **Fourth Semester Course Modules**

### DS 401: Internship based Dissertation / Thesis

Under this semester, the Students are required to undertake internship in various external organisations, in which they will be writing dissertation or thesis under the supervision of faculty members and external mentorship. Students are required to submit one Dissertation of 60-120 pages involving the digital technologies and socio-economic development of the country. It should have followed proper research design and methodology. The methodology will be field-based, analytical and laboratory based research. The Dissertation should be impact-oriented and generate suitable evidence for policy-changes. This Dissertation /Thesis should be original and evaluated by internal and external experts to the University satisfaction.

## **Tentative Electives for the Programme:**

#### **Electives: Management Information System**

**Course Outlines:** The course is designed to help the students to understand management information system (MIS), their uses and management in any organization.

#### **Course Content:**

- 1. Organisations and Information Systems
- 2. Concepts of Management Information Systems
- 3. Information Systems and Management Strategy
- 4. Electronic Commerce, Electronic Business, Electronic Governance
- 5. Managing Information Systems
- 6. Ethical and Social Issues and MIS
- 7. Information Technology Infrastructure and Choices
- 8. Networking and Telecommunication
- 9. Information Systems Security and Control
- 10. Information Systems Development and Project Management
- 11. Managing Data Resources
- 12. Business Process Integration and Enterprise Systems
- 13. Decision Support Systems
- 14. ICT for Development and E-Governance
- 15. The Society of the Internet
- 16. Open Source Software

## **Reading Lists:**

Gordon Davis, Management Information System : Conceptual Foundations, Structure and Development, Tata McGraw Hill, 21st Reprint 2008.

Analysis and Design of Information Systems by James Senn

Ashok Arora & Bhatia: Management Information Systems (Excel)

Haag, Cummings and Mc Cubbrey, Management Information Systems for the Information Age, McGraw Hill, 2005. 9th edition, 2013.

James O Brien, Management Information Systems – Managing Information Technology in the E-business enterprise, Tata McGraw Hill, 2004.

Jessup & Valacich: Information Systems Today (Prentice Hall India)

Kenneth C. Laudon and Jane Price Laudon, Management Information Systems – Managing the digital firm, PHI Learning Pearson Education, PHI, Asia, 2012.

L. M. Prasad : Management Information Systems (Sultan Chand)

Management Information Systems - Dr Sahil Raj - Pearson Publications

Management Information Systems - Girdhar Joshi - Oxford Publications

Management Information Systems – Hitesh Gupta – International Book House Ltd

Management Information Systems - M.Jaiswal & M.Mittal - Oxford Publications

MIS a Conceptual Framework by Davis and Olson

Rahul de, MIS in Business, Government and Society, Wiley India Pvt Ltd, 2012

Raplh Stair and George Reynolds, Information Systems, Cengage Learning, 10th Edition,

Raymond McLeod and Jr. George P. Schell, Management Information Systems, Pearson Education, 2007.

Robert Schultheis and Mary Summer, Management Information Systems – The Managers View, Tata McGraw Hill, 2008.

Turban, McLean and Wetherbe, Information Technology for Management – Transforming Organizations in the Digital Economy, John Wiley, 6th Edition, 2008.

#### Elective: Society, Networks and Social Networks

*Course Outlines:* Society is now increasingly being networks as per the new ICTs. Facebook, Twitters, Whatsaap, Skypes are changing the relationship between groups, segments of the society. The course will familiarize students with the state of network science as a paradigm comprising multidisciplinary approaches to the analysis of relational data. Students will be able to read introductory network metrics and understand how these measures speak to theories of human behavior as well as put together an original piece of analysis using network data. Students will also learn basic data capture and analysis techniques that can enable them to begin, if not complete, a full social network analysis study.

#### **Course Contents:**

1. The concepts of Networks and Social Networks; The Sources of Social Power

2. Culture of Connectivity: Engineering Sociality in a culture of connectivity

- 3. Rise of the Network Society; Googlisation and Networks
- 4. Models of Network Structures
- 5. Network Analysis: Some Basic Principles

- 6. Network Theory and Social Structures
- 7. Network Theory and Organisation Theory
- 8. Networks and Privacy
- 9. Networks, Politics and Anonymity
- 10. Network Theory and the NET
- 11. Networks Effects

### **Readings List:**

Barnes, J.A (1972), Social Networks, in Addison-Wesley Module in Anthropology, 26:1-29.

Borgatti, Stephen P. Everett, Martin G. Johnson, Jeffrey C. (2013) Analyzing Social Networks. 2013. Thousand Oaks, CA: Sage.

Burt, Ronald (1980), Innovation as a Structural Interests: Rethinking the Impact of Network Position on Innovation Adoption, Social Networks, 2 (4): 327-355.

Burt, Ronald (1980), Models of Network Structures, Annual Review of Sociology, 6: 79-141.

Burt, Ronald (1997), Maximizing Your Social Capital: A New Guide to Networking, Capital Ideas, 1(1), University of Chicago, Booth School.

Burt, Ronald (2013), Network Advantage in Virtual Worlds, in the Book Structural Holes in A Virtual Worlds.

Castells, Manuel (2010) Conclusion: Making Sense of Our Own world (pp.371-396) in End of Millennium, Vol.3 of the Information Age: Economy, Society, Culture. 2nd Edition. Hoboken: Wiley Blackwell.

Castells, manuel (2010). Prologue: The Net and the Self, (pp1-27) in Rise of the Network Society, Vol.1 of The Information Age: Economy, Society, Culture. 2nd Edition. Hoboken: Wiley-Blackwell.

De Sola Pool, Ithiel, & Manfred Kochen (1978/9) Contacts and Influence, Social Networks, 1:5-51.

Fischer, Claude S. (2013). Inventing the Social Networks, Boston Review, December 19.

Granovetter, Mark (1983), The Strength of Weak Ties: A Network Theory Revisited, Sociological Theory, 1(1): 201-233.

Hansen, Derek Shneiderman, Ben Smith, Marc A. Analyzing Social Networks with NodeXL. New York: Morgan Kaufman.

Henning, M. et al. (2013) Studying Social Networks. Berlin: Springer-Verlag.

Licoppe, Christian & Zbigniew Smoreda, (2004), Are Social Networks Technologically Embedded?: How Networks are Changing Today with Changes in Communication Technology, Social Networks, 27 (4): 317-335.

Mann, Michael (1986) Societies as Organised Power Networks (pp 1-33) in the Sources of Social Power, Vol.1 of A History of Power from the Beginning to A.D. 1760, New York: Cambridge University Press.

Mann, Michael (2013), the Source of Social Power, New York: Cambridge University Press.

Marschall, Daniel (2012), The Company We Keep: Occupational Community in the High-Tech Network Society, Philadelphia: Temple University Press.

Merton, Robert (1984), The fallacy of the Last Word: The case of Pietism and Science, American Journal of Sociology, 89 (5): 1091-1121.

Milgram, Stanley (1967), The Small World Problem, Psychology Today, Vol. 22: 61-67.

Rainie, Lee & Barry Wellman (2012), The New Social Operating System of Networked Individualism" pp 3-20 in Networked: The New Social Operating System, Cambridge, MA: MIT Press.

Schich, Maximillan et al (2014), A Networ Framework of Cultural History, Science 345: 558-562

Van Dikck, Jose (2013) Engineering Sociality in a Culture of Connectivity, (pp 3-22) in The Culture of Connectivity: A Critical History of Social Media. New York: Oxford University Press.

Wellman, Barry (1983), Network Analysis: Some Basic Principles, Sociological Theory, 1: 155-200.

Yzer, Marco C., & Brian G. Southwell, (2008), New Communication Technologies, Old Questions, American Behavioural Scientists. 52 (1): 8-20.

#### Elective: Spatial Data Infrastructure: Policy, Structure and Operation

**Course Outlines:** Spatial data infrastructure is now widely recognized as a important spoke in the wheel of information society. It provides the tool for continents, countries, regions and local governments to better organize, plan and manage their natural, cultural and economic resources. The student will

learn the SDI policy, Structure and Operation in India. Through this course, the student will also learn the application of GIS technologies.

#### **Course Contents:**

- 1. Introduction to Spatial Data Infrastructure: Background, History, Scope and Significance; Meta-data standard contents
- 2. Introduction to Geographical Information Services: Techniques, Process and Practices
- 3. GIS and its application in National Development
- 4. SDI in India: Policy, Organisation, Data, Technologies, Standards, Delivery Mechanisms, Financial and Human Resources
- 5. The Study of Institutions: NSDI, SDI, National Resource Information Systems (Dept. of Space), National Map Policy; Digital Cartographic Database (Survey of India), National Resources Data Management System (Dept of Science & Technology) and other initiatives through GSI, FSI, NATMO etc.
- 6. Governance issues of SDI in India; SDI in Socio-Economic Development of the country

### **Reading Lists:**

Bishr, Y. (1998). Overcoming the Semantic and Other Barriers to GIS Interoperability, International Journal of Geographical Information Science, 12 (4): 299–314.

Budhathoki, N.R. and Z.N. Budić (2007). "Expanding Spatial Data Infrastructure Knowledge Base in Research and Theory," in Harlan Onsrud (Ed). Advancing Spatial Data Infrastructure Concepts. California: ESRI Press.

de Man, W.H.E. (2000). Institutionalisation of Geographic Information Technologies: Unifying Concept?, Cartography and Geographic Information Science, 27 (2): 139–152.

de Man, W.H.E. (2006). Understanding SDI: Complexity and Institutionalization, International Journal of Geographical Information Science, 20 (3): 329–343

DST (2005). National Map Policy. New Delhi: Department of Science and Technology, Government of India, at: http://dst.gov.in/, (accessed 13 July 2005).

Enemark, S. and I. Williamson (2004). Capacity Building in Land Administration: A Conceptual Approach, Survey Review, 39 (294): 639–650.

Feeney, M.E.F. (2003). "SDIs and Decision Support", in Ian Williamson, Abbas Rajabifard, and Mary-Ellen F. Feeney (Eds.). Developing Spatial Data

Infrastructures: From Concept to Reality. Boca Raton: CRC Press, pp. 195-210.

Georgiadou, Y. and R. Groot (2002). Policy Development and Capacity Building for Geo-Information Provision: A Global Goods Perspective, GIS@development: The monthly magazine on geographic information science, 6 (7): 33–40.

Georgiadou, Y., S.K. Puri and S. Sahay (2005). Towards a Potential Research Agenda to Guide the Implementation of Spatial Data Infrastructures: A Case Study from India, International Journal of Geographical Information Science, 19(10): 1113–1130.

Giff, G. (2006). "The Value of Performance Indicators to Spatial Data Infrastructure Development", Proceedings of the GSDI-9 Conference, Santiago, Chile, November 6–10.

GOI (2003). NSDI Metadata Standards, ISRO-NNRMS-TR-104-2003, Version 3. New Delhi: Government of India. GOI (2006).

Resolution No. SMP/25/003/05 Government of India, Ministry of Science and Technology, Department of Science and Technology, New Delhi.

Groot, R. (2001). Reform of Government and the Future Performance of National Surveys, Computers, Environment and Urban Systems 25 (4–5): 367–87.

Grus, L.J.C. and K.B. Arnold (2007). Multi-view SDI Assessment Framework, International Journal of Spatial Data Infrastructures Research, 2007 (2): 33–53.

GSDI (2006). What are Spatial Data Infrastructures?, GSDI Newsletter, 8. at: http://gsdi.org/newsletters/GSDI/GSDInewsletterApr06.pdf.

Gurstein, M. (2003). Effective use: A Community Informatics Strategy Beyond the Digital Divide, First Monday, 8:12. India GeoPortal, at: www.nsdiindia.org.in, (accessed 24 February 2009).

INSPIRE (2005). INSPIRE Principles, at: http://inspire.jrc.it/, (accessed 15 May 2006). Interoperability Clearinghouse, (2006). Glossary of Terms, at: http://www.ichnet.org/glossary.htm, (accessed 9 December 2007).

ISRO (Indian Space Research Organisation) (2001). National Spatial Data Infrastructure: Strategy and Action Plan. Discussion Document. ISRONNRMS-SP-75-2001, Bangalore.

Masser, I. (2004). "Capacity Building for Spatial Data Infrastructure Development". Keynote Presentation at the 7th International Seminar on GIS for Developing Countries (GISDECO). Johor, Malaysia, May 10–12.

Masser, I. (2005). GIS Worlds: Creating Spatial Data Infrastructures. Redlands, CA: ESRI Press.

McCall, M.K. (2003). Seeking Good Governance in Participatory-GIS: A Review of Processes and Governance Dimensions in Applying GIS to Participatory Spatial Planning, Habitat International, 27 (4): 549–73.

Mennecke, B.E. (1997). Understanding the Role of Geographic Information Technologies in Business: Applications and Research Directions, Journal of Geographic Information and Decision Analysis, 1 (1): 44–68.

Nebert, D.D. (Ed). (2004). Developing Spatial Data Infrastructures: The GSDI Cookbook, Version 2.0, Global Spatial Data Infrastructure Association, at: http://www.gsdi.org/, (accessed December 9, 2008).

Nedović-Budić, Z., and J.K. Pinto (2001). Organisational (Soft) GIS Interoperability: Lessons from the U.S., International Journal of Applied Earth Observation and Geoinformation, 3 (3): 290–98.

North, D.C. (1993). Institutions and Credible Commitment, Journal of Institutional and Theoretical Economics, 149(1): 11–23 NRSC (undated) Remote Sensing Data Policy at: www.nrsa.gov.in/index.html, (accessed 15 December 2008).

Rajabifard, A., Mary-Ellen F. Feeney, I. Williamson and I. Masser (2003). "National SDI Initiatives", in Ian Williamson, Abbas Rajabifard, and Mary-Ellen F. Feeney (eds.) Developing Spatial Data Infrastructures: From Concept to Reality. Boca Raton: CRC Press, pp. 95–109.

Rao, M. (2006). India's NSDI – Back into the Future, Coordinates, 2(6): 12–20. Rao, M. 2007). NSDI – Then, Now and Whenever, Coordinates, 3(8): 10–13.

Sahay, S. and G. Walsham (1996). Implementation of GIS in India: Organisational Issues and Implications, International Journal of Geographic Information System, 10 (4): 385–404.

Sharma, G.N. (2003). Financial Strategy for National Spatial Data Infrastructure, Technical Report. New Delhi: Feedback Strategic Consultancy Limited

Singh, P.K. (2005). Governance Issues in GIS Infrastructure in India, International Journal of Rural Management, 1(2): 223–244.

SOI (2006). Guidelines for Implementing National Map Policy, Dehradun: Survey of India, at : www.surveyofindia.gov.in/, (accessed 15 December 2006).

Tettey, W.J. (2002). ICT, Local Government Capacity Building, and Civic Engagement: An Evaluation of the Sample Initiative in Ghana, Perspectives on Global Development and Technology, 1 (2): 165–192.

Tuladhar, A.M. (2004). "Approach for Organisation Restructuring Toward Customer Orientation in the Context of Spatial Data Infrastructure", in Proceedings of the 7th International Conference on Global Spatial Data Infrastructure, Bangalore. February 2–6.

Williamson, I. (2004). "Building SDIs: the Challenges Ahead" in Proceedings of the 7th International Conference on Global Spatial Data Infrastructure, Bangalore, February 2–6.

Williamson, I.P., A. Rajabifard, and E. Stig (2003). "Capacity Building for SDIs", in Proceedings of 16th United Nations Regional Cartographic Conference for Asia Pacific, Okinawa, Japan, July 14–18.

#### List of Electives (For Third Semester)

#### Department of Public Policy, Law and Governance

- 1. Democracy and Institutions of Governance
- 2. Law and Development
- 3. Ideas and Issues in Public Administration
- 4. Justice
- 5. Neo-Liberalisms and the Changing Role of State
- 6. Sustainable Rurali Livelihhod
- 7. Multilevel Governance
- 8. Socity, Bussiness and Governance in India
- 9. Education Policy and Governance in India
- 10. Politics of Development
- 11. Research Trends in Public Policy, Law and Governance

#### **Department of Economics**

- 1. Macro-Economics
- 2. Macro-Economics
- 3. Mathematical Methods of Economics
- 4. Statistical Methods in Economics
- 5. Introduction to Environmnet and Ecology
- 6. Dynamics of Communication Skills and Technical Writings
- 7. Public Economics
- 8. Theories of Economic Growth
- 9. Developmental Economics
- 10. Environmental Economics
- 11. Computer Application in Mathematical Economics & Statistics
- 12. Natural Resource Economics
- 13. Research Trends in Economics

#### **Department of Social Works**

- 1. Sociology Concepts for Social Work
- 2. Personality Development and Dynamics of Behaviour
- 3. NGO Management
- 4. Development Management
- 5. Women, Gender and Social Work
- 6. Social Welfare Administration
- 7. Research Trends in Social Works

#### Department of Culture and Media Studies

- 1. Introduction to Cultural Studies
- 2. Visual Cultures
- 3. Introduction to Media Studies
- 4. Video Production
- 5. Journalism: Theory and Concepts
- 6. Fundamental of Photography
- 7. Basics of Visual Designs
- 8. Understanding of Society and Politics in India
- 9. Indigenous Culture
- 10. Cinema Studies
- 11. Intercultural Communication
- 12. Heritage and Museum Studies
- 13. Advertising and Public Relations
- 14. Reading Television
- 15. New Media
- 16. Production of Fiction Film

# Administration



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Prof. M.M. Salunkhe Designation: Founder Vice Chancellor



Mr K V S Kameswara Rao Designation: Registrar Email id : <u>registrar@curaj.ac.in</u>



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Prof. Muthukalingan Krishnan Designation: Dean (Accreditation, Ranking, Collaboration and Internationalization)



Prof. Aditya K. Gupta Designation: Chief Vigilance Officer, Dean (Research) Email : <u>cvo@curaj.ac.in</u>, <u>akg54@curaj.ac.in</u>



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