

**National Institute of Technology Calicut  
School of Management Studies**

**Courses for Ph.D.**

**MS9001E RESEARCH METHODOLOGY**

Pre-requisites: Nil

L	T	P	O	C
4	0	0	8	4

**Total Lecture Sessions: 52**

CO1: Develop an acumen of scientific inquiry by comprehending the research philosophy

CO2: Design suitable methodological approach that suits a research are of inquiry

CO3: Formulate methods for data collection, analysis and evaluation which serves the research purpose

CO4: Justify the ethical standard adopted during the execution of research and in publishing

**Philosophy & Design of Scientific Research Methods**

Philosophy of research, Purpose of research, Critical Thinking, Scientific Method, Research methodology- Understanding the language of research – Concepts, constructs, operational definitions, variables, propositions, hypotheses, theories, and models - Research process-Problem identification and formulation, Frameworks in research – Literature review - Systematic Literature Review - PRISMA Framework- Bibliometric Analysis - Sources of Literature - Reference Management Tools - Research hypothesis - Research Design - Types of research: Qualitative and Quantitative Research; Measurement design; issues - Methods of data collection. Types of data- Primary & Secondary data- Scales of measurement- Sources and collection of data Observation method- Interview method– Survey- Instrument Design - Validity and Reliability.

**Data Collection and Analysis**

Sampling- Steps and characteristics of sampling design Population, Sample, Sampling Frame, - Sample size and its determination - Types of sampling distributions - Sampling error - Sampling in Qualitative and Quantitative research, Qualitative Data Analysis - Coding, Theme Generation - Design of Experiments - Statistics in research - Descriptive statistics and inferential statistics- Measures of central tendency, dispersion, skewness, asymmetry- Measures of relationship-Hypothesis testing - univariate, bivariate and multivariate analysis - Parametric and Nonparametric tests, Correlation and regression- Simple regression analysis- Multiple regression - Stepwise regression, Logistic Regression - Regression Models and Comparison, Reliability Tests - Principal Component Analysis, Factor Analysis, Interpretation of Results.

**Research Writing**

Research Communication Philosophy, Research Communication Outlets - Reporting and presenting research - Written and oral communications - Scientific Writing - Structuring a research paper -Research Proposals - Writing for publication - Paper title, abstract and keywords, Introduction, Literature Review, Methods, Results, Findings, Discussion, Implication, Conclusion, Limitation, Future Studies, References, Bibliography, Annexure, Appendix, Tables and Figures, Citation, Reference styles, Preparing cover letter, title page, Blind Manuscript, Journal selection - Impact factor - indices and quality indicator, Predatory

Journals, Responding to peer review comments, Language - Grammar - Sentence and paragraph - passive and active voice, tenses, paraphrasing.

### **Research Impact and Research Ethics**

Intellectual property rights - WIPO - Copyright - Patents - Industrial Design Trademarks and Geographical indicators, Patent Specification, Research Ethics - Scientific misconduct, Plagiarism, Falsification, Fabrication, COPE, Ethics committee - Principlism. Nuremberg code in research ethics - Ethics in Qualitative Research - Occupational health and safety - Mental health - dealing with rejections

### **References:**

1. Jackson, S. L. (2015). *Research methods and statistics: A critical thinking approach*. Cengage learning
2. Krishnaswamy, K.N., Sivakumar, A.I., & Mathirajan, M., (2006) *Management Research Methodology*, Pearson Education
3. Lebrun, J. L., & Lebrun, J. (2021). *Scientific Writing 3.0: A Reader and Writer's Guide*. World Scientific..
4. Leedy, P D (2018) *Practical Research: Planning and Design* (12 e) Pearson
5. Thiel, D. V. (2014). *Research methods for engineers*. Cambridge University Press.

## MS9002E APPLIED MULTIVARIATE ANALYSIS

L	T	P	O	C
3	0	0	6	3

Pre-requisites: Nil

**Total Lecture Sessions: 39**

### **Course Outcomes:**

CO1: Outline the concepts of multivariate statistical analysis as applied to practical contexts in business and management

CO2: Develop models to analyse dependence and interdependence among variables

CO3: Plot and picture higher dimensional data graphically and contrast scenarios visually

CO4: Develop fundamental knowledge of concepts underlying data-based decision making using multivariate data

### **Basics of Multivariate Analysis**

Review of Basics of Vector and Matrix Algebra and Applicability to Multivariate Analysis Review of Singular Value Decomposition (SVD) of General Matrices, Eigen Structure (Eigenvector And Eigenvalue) Decomposition Of Square Matrices, Statistical Applications Of Eigen Structure and SVD Analysis of Various Matrices, Use of SVD to Determine Rank, Compute Determinant, and Define Inverse of Various Special Matrices, Regression Analysis: Overview of Multiple Linear Regression Analysis and Its Applications. Ordinary Regression Analysis and Partial Regression Analysis, Methods of Testing Significance of Various Regression Models, Principal Components Analysis: Overview of Principal Components Analysis (PCA), Relationship to Multivariate Normal Distribution and to Eigen Structure and SVD.

### **Factor and Cluster Analysis**

Exploratory Factor Analysis: Principal Axis Form of Exploratory Factor Analysis (FA) and its Relationship to PCA, Computation of Factor Scores, Factor Loadings and Communalities, Multidimensional Scaling: Metric and Nonmetric Models and Methods of "Two-Way" Multidimensional Scaling (MDS), Methods of Multidimensional Analysis of Preferential Choice (or other "Dominance") Data. MDS as an Alternative to PCA or Exploratory FA, Cluster Analysis: Hierarchical Clustering, Single, Complete and Average Linkage, Ward's Method, and Kth Nearest Neighbour Clustering, Partitioning, Canonical Correlation Analysis (CCA): Inter-Relating Two Matrices of Variables Defined on the Same Objects by Finding Linear Combinations of each that have Maximum Correlation, Canonical Variates and Their Canonical Correlation, Methods of Computing a Set of Ordered Canonical Variates.

## Analysis of Variance

Analysis of Variance (ANOVA): Standard ANOVA, ANOVA as a Special Case of Multiple Linear Regression Analysis with Dummy Independent Variables, ANCOVA (Analysis of Covariance), ANCOVA as a Special Case of Partial Regression Analysis, MANOVA (Multivariate ANOVA) and MANCOVA (Multivariate ANCOVA), MANOVA and MANCOVA as Special Cases of Canonical Correlation Analysis, Multiple Discriminant Analysis: Finding Linear Combinations of a Set of Given Variables that Best Discriminate among Two or more Different Groups, MDA as Special Case of Canonical Correlation Analysis. Confirmatory Factor Analysis, Structural Equations Models with Latent Variables, Logit Choice Models.

## References:

1. Afifi, A., & Clark, V. (2000). *Computer-aided multivariate analysis*. New York: Chapman & Hall.
2. Härdle, W., & Simar, L. (2007). *Applied multivariate statistical analysis*. Berlin: Springer.
3. Harlow, L. (2005). *The essence of multivariate thinking*. Lawrence Erlbaum Associates, Incorp.
4. Johnson, R. A., & Wichern, D. W. (2002). *Applied multivariate statistical analysis*, 5. No. 8. Upper Saddle River, NJ: Prentice Hall
5. Lattin, J. M., Carroll, J. D., & Green, P. E. (2003). *Analyzing multivariate data*.
6. Tabachnick, B., & Fidell, L. (2007). *Using multivariate statistics* (5th ed). London: Pearson Education, Inc.
7. Timm, N. (2002). *Applied multivariate analysis*. Berlin: Springer.

## MS9003E ECONOMETRICS

L	T	P	O	C
3	0	0	6	3

Pre-requisites: Nil

**Total Lecture Sessions: 39**

### **Course Outcomes:**

CO1: Understand the basic principles of econometrics and the fundamental techniques in linear regression models.

CO2: Understand the assumptions underlying the classical linear regression model and to deal with their violations.

CO3: Analyse and interpret real world economic data in economic policy formulation and business decisions.

CO4: Develop a solution for econometric problems in business disciplines such as economics, finance and marketing in a micro and macro perspective.

### **Introduction to Econometrics**

Introduction to Econometrics: Definition, Scope and Goals of Econometrics, Methodology of Econometric Research, the Structure of Economic Data. The Simple Linear Regression Model: Definition, Deriving the Ordinary Least Square (OLS) estimates, Properties of OLS estimates, Goodness of fit. The Multiple Linear Regression Model: Assumptions, Estimation of parameters of multiple regression, Properties of multiple regression model OLS estimates, coefficient of determination,  $R^2$ ; Hypothesis testing, Comparing two  $R^2$  values: the adjusted  $R^2$ . Functional forms of Regression models: How to measure elasticity-the log linear model, comparing linear and log-linear regression models, How to measure growth rate- The semi-log model, and Reciprocal models.

### **Managing the Assumptions**

Violating the Assumptions of Classical Linear Regression Model (CLRM): Autocorrelation, Heteroscedasticity, and Multicollinearity; nature, consequences, detection and remedial measures. Types of specification errors.

### **Dummy Variables and Simultaneous Equation Models**

Dummy Variables and Simultaneous Equation Models: Describing qualitative information, A Single Dummy Independent Variable, the uses of dummy variables, dummy variable trap. Simultaneous

Equation Models: introduction, structural and reduced form equations consequences of ignoring simultaneity, simultaneous equation bias, the Identification Problem, Estimation of simultaneous equation model.

**References:**

1. Dougherty, C. (2007). *Introduction to econometrics* (3rd ed), Indian Edition. Oxford: Oxford University Press.
2. Greene, W. H. (2003). *Econometric analysis* (5th ed). London: Pearson Education, Inc.
3. Gujarati, D. N., & Porter, D. C. (2009). *Essentials of econometrics* (4th ed, international ed). New York: McGraw-Hill.
4. Gujarati, D. N., Porter, D. C., Gunasekar, S., & Basic Econometrics, Tata McGraw-Hill Education Pvt, Ltd. (5th ed). (2011).
5. Kmenta, J. (2008). *Elements of econometrics, Indian reprint, Khosla publishing house* (2nd ed).
6. Koutsoyiannis, A. (1977). *Theory of econometrics* (2nd ed). London: Macmillan Press Ltd.
7. Wooldridge, J. M. (2015). *Introductory econometrics: A modern approach* (6th ed). South-Western College Publishing.

## MS9004E MICROECONOMETRICS

L	T	P	O	C
3	0	0	6	3

Pre-requisites: Nil

**Total Lecture Sessions: 39**

### **Course Outcomes:**

CO1: Identify the fundamental statistical concepts of multivariate regression

CO2: Explore research questions in econometric settings and construct a testable hypothesis

CO3: Develop a fundamental knowledge of causality and challenges with observational data

CO4: Evaluate the causal effects of variables using econometric techniques

### **Introduction to Models**

Review Of Statistics and Matrix Algebra; Simple Regression Model: Classical Linear Regression Model Using Matrix Algebra and Ordinary Least Squares (OLS) Estimation-Properties of OLS Estimator, Gauss-Markov Theorem; Forecasting; Review of Statistical Inference; Regression Inference; Standard Error Issues; F-Tests; Nonlinear Regression and Least Squares Estimation (NLS); Optimization Methods; Maximum Likelihood Estimation (ML) and Other Tests; Structural Equation Modelling - Causal modeling; Path analysis- Manifest variables, Latent variables; Confirmatory factor analysis; Second order factor analysis; Regression models; Covariance structure models; Correlation structure models

### **Sample Design**

Sample Design and Weights; Data Problems; Measurement Error; Iron Law of Econometrics; Dummy Variables; Interaction Effects; Binary Dependent Variable: Linear Probability Model, Logit and Probit Models, Multinomial and Ordinal Choice Models; Identification Problems in The Social Sciences and Everyday Life; Sample-Selection Bias; Heckman Correction: Benefits, Problems and Alternatives, Poisson & Tobit Estimators; Estimation when the Dependent Variable is Censored at Zero; Model for Count Data, Truncation; Censoring and Corner Solutions; Simultaneity Bias; Identification; Simultaneous Equations Model (SEM) : Structural models, Simultaneous equations bias. Identification problem, Structure and the reduced form, Indirect least squares, Two-stage least squares, Sampling variance of 2SLS estimates.

### **Quasi-experimental Methods**

Panel Data Methods: Aspects of Panel Data, Benefits of Panel Data, Comparisons with Independently Sampled Data from Two Time Periods, Fixed Effects Estimation Using Panel Data, Fixed and Random Effects; Inference in Observational Settings: Causality, Counterfactuals, Causal Inference, Experiments, and Potential Outcomes, Instrumental Variables, Solutions for Omitted-Variables and Measurement Error,

Instrumental Variable (IV) Estimation, Regression Discontinuity Design, Difference in Difference Methods, Randomized Control Trials, Matching and Weighting, Propensity Scores, Program Evaluation Methods.

**References:**

1. Angrist, J., & Pischke, J. S. (2009). *Mostly harmless econometrics: An empiricist's companion* (1st ed). Princeton: Princeton University Press. Gujarati, D. N. (2009). *Basic econometrics* (5th ed). Tata: McGraw-Hill Education.
2. Angrist, J., & Pischke, J. S. (2014). *Mastering 'metrics: The path from cause to effect* (1st ed). Princeton: Princeton University Press.
3. Cameron, C. A., & Trivedi, P. K. (2005). *Microeconometrics: Methods and applications* (2nd ed). Cambridge: Cambridge University Press.
4. Cameron, C. A., & Trivedi, P. K. (2009). *Microeconometrics using Stata* (2nd ed). Stata Press.
5. Gujarati, D. N. (2009). *Basic econometrics* (5th ed). Tata: McGraw-Hill Education.
6. Wooldridge, J. *Econometric Analysis of cross section and panel data* (2nd ed). Cambridge, MA: MIT Press. (2010).



## MS9150E DIVERSITY, EQUITY AND INCLUSION IN ORGANIZATIONS

Pre-requisites: Nil

L	T	P	O	C
3	0	0	6	3

### Total Lecture Sessions: 39

#### Course Outcomes

CO1: Articulate the terms diversity, equity and inclusion and how they apply to contemporary businesses.

CO2: Demonstrate understanding and respect for diversity and ability to effectively work with and across diverse set of demographics and geographies

CO3: Discuss current perspectives regarding how diversity, inclusion, creativity, and innovation intersect in global organisations.

CO4: Apply knowledge and skills gained to assist in creating a more inclusive workplace environment.

### Prevalence and Importance of DEI

Understanding diversity, equity and inclusion in the context of organizations; Global legislation and public policies towards DEI, Global demographic trends, Stereotypes, prejudices, Inclusion-Exclusion construct, Dehumanization and oppression, , Diversity approaches in organisations; Recognizing and Reducing Implicit Bias; Making the case for DEI; Equal Employment Opportunity

### Theoretical approaches and cultural accommodation

Critical Race Theory, Microaggression - racial, Gender and Minority, Workplace ostracism, Cultural Sensitivity, Cross-cultural perspectives - communication, behaviors, body language, diversity management and leadership, Cultural sensitization,

### Building and maintaining an inclusive organizational culture

Role of DEI initiatives for modern workplaces; The DEI continuum for organisations; Success and failure of DEI initiatives at workplaces. The inclusive workplace model, Positive Action Program, Positive Organizational Behavior, Work-Life Balance, Barriers and Benefits of implementing the inclusive approach

### References:

1. Baum, B. (2021). Diversity, Equity, and Inclusion Policies: Are Organizations Truly Committed to a Workplace Culture Shift?. *Journal of Business and Behavioral Sciences*, 33(2), 11-23.
2. Chaudhry, S. (2023). Measuring diversity, equity and inclusion: a holistic approach. *Development and Learning in Organizations: An International Journal*, 37(2), 4-6.
3. Olsen, J.E., & Martins, L.L. (2012). Understanding organizational diversity management programs: A theoretical framework and directions for future research, *Journal of Organizational Behavior*, 33(8), 1168-1187, <https://doi.org/10.1002/job.1792>
4. Mor Barak, M.E. (2014). *Managing Diversity: Toward a Globally inclusive workplace*, Thousand Oaks, CA: Sage
5. Hays-Thomas, R. (2022). *Managing workplace diversity, equity, and inclusion: A psychological perspective*. Taylor & Francis.

## MS9151E TALENT MANAGEMENT IN MSMEs AND FAMILY BUSINESSES

Pre-requisites: Nil

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### Course Outcomes:

- CO1: Categorize and summarize key differentiating factors among start-up, small and medium enterprise and family business
- CO2: Evaluate the importance of formal talent management process in start-up, small and medium enterprise and family business
- CO3: Prepare policy documents and guidelines for various talent management functions for start-up, small and medium enterprise and family business
- CO4: Formulate methods for first hiring, succession planning, leadership development, gain sharing and manipulate the talent management process in a Merger and Acquisition scenario and involving expatriates

### Understanding MSMEs and FBs and General HRM practices

Concept, Nature and Scope of Start-ups and Small and Medium Enterprises, Family vs Non-family business; Peculiarities of Family Businesses; Growth and Development of HRM in India; Emerging Trends of HRM in a globalised economy; Small and Medium Enterprises (SME) and Family Business Organizations as social entities; Environmental factors affecting Start-ups, SMEs and Family Business; Legal Aspects of Employment and Labour pertaining to Start-ups, SMEs and Family Business; Industrial Relations, Trade Unions, Resolving Disputes; Organisational objectives, functions, relationships; Organisational structure of formal and informal organisations; Organization lifecycle- growth and decline; Strategic HRM in SMEs

### Specificities in HRM of MSMEs and FBs

Growth of the organization from a proprietorship to a professionally managed entity; HR Planning and Forecasting; Demand and Supply Forecasting; Succession Planning; Job Analysis and Job Design; Recruitment, Sources of recruitment, budgeting, recruitment process outsourcing; First hiring, vendor management; Selection; Assessment, tools and methods, interviews, testing; Acquiring; Orientation and Training: Nature of training, Objectives in training, Types of training, requirements of effective training conventional training techniques; Management and Leadership development; Mentoring; Power and politics; Conflict and negotiation; Performance appraisal, Traditional performance appraisal systems, Appraisal programs, Feedbacks

### Managing workforce in MSMEs and FBs

Compensation Management in Start-ups; Compensating partners and family members; Compensation as a motivation method; Payroll creation; Compensation Structure; Statutory compliance; Job-evaluation; Incentive and Bonus decisions; Financial and Non-financial rewards; Employee Benefits in Start-ups and SMEs; Stock Option Plans; Gain and Profit Sharing; Empowering Employees in SMEs; Job enrichment and

Job rotation in small organizations and family owned business; Career Management; Promotions; Separations and Rightsizing; Employee Welfare; Handling Merger and Acquisitions in Start-ups and SMEs; Public Relations, Internal communications; Handling Expatriates and Repatriation, Inclusion and Diversity in SMEs; HR Challenges involved in diversification, standardization and formalization of small organizations

**References:**

1. Cooper, C. L., & Burke, R. J. (Eds.). (2011). *Human resource management in small business: Achieving peak performance*. Edward Elgar Publishing.
2. Dana, L. P., Sharma, N., & Singh, V. K. (Eds.). (2022). *Managing Human Resources in SMEs and Start-ups: International Challenges and Solutions* (Vol. 5). World Scientific.
3. Gnan, L., & Flamini, G. (Eds.). (2021). *Designing and Implementing HR Management Systems in Family Businesses*. IGI Global.
4. Machado, C. (Ed.). (2013). *Effective Human Resources Management in Small and Medium Enterprises: Global Perspectives: Global Perspectives*. IGI Global.
5. Reid, R., Morrow, T., Kelly, B., & McCartan, P. (2002). People management in SMEs: an analysis of human resource strategies in family and non-family businesses. *Journal of small business and enterprise development*, 9(3), 245-259.

## MS9152E RESEARCH METHODS IN BEHAVIOURAL SCIENCE

Pre-requisites: Nil

L	T	P	O	C
4	0	0	8	4

**Total Lecture Sessions: 52**

### Course Outcomes:

CO1: Establish perspective in understanding the research strategies to be adopted for the behavioral science question of interest

CO2: Design an appropriate research strategy for the chosen behavioural science context

CO3: Justify the use of appropriate methods for data collection and analysis

CO4: Structure and present the research while upholding the highest ethical standards.

### Foundations of Behavioural Science Research:

The science of behavior, Theories in Behavioral sciences, Organisational Behavior, Consumer Behavior, Theory building and development. Purpose of research, Professional and social responsibilities of behavioral researchers, research and the common good, Research settings, Formulating research questions, replication research, Framework development, variable identification, Delphi Method, Proposition building and Hypothesis generation; Literature Review; Systematic Review, Reference Management Tools, Synthesis of Literature; Gap Identification

### Qualitative Methods in Behavioural Science Research :

Qualitative Research Strategies, Sampling, Sample size, Theoretical Saturation, Qualitative research methods; Methods of data collection; inclusion and exclusion criteria; Measurement Strategy: Credibility, Dependability; Transparency in research; Research Designs, Qualitative Data, Data Collection; Qualitative Data Analysis, Coding and Theme generation, Tools for QDA, Cases of Qualitative research in Behavioral science

### Quantitative Methods in Behavioural Science Research:

Quantitative Research Strategies: Sampling, sample size, Data collection methods, Measurement Instrument development, Validity and Reliability; Data Analysis methods: Univariate, Bivariate and Multivariate analysis, Hypothesis testing: Parametric and non-parametric tests, Data Visualization, Interpretation, Correlation analysis, Regression; logistic regression, Factor analysis, Principal component analysis, Structural Equation modeling, Path analysis, Cases of Quantitative research in Behavioral science

### Ethics and Research Communication:

Mixed Methods Research; Research communication; Reporting; Writing styles, citation and references, APA style, Plagiarism, Scientific Misconduct, Ethical Treatment of Research Participants, Ethics committee, Publishing research

### References:

1. Adu P (2019) *A Step-by-Step Guide to Qualitative Data Coding*, Routledge
2. Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches*. Sage.
3. Bryman A (2012) *Social Research Methods*, (4e) Oxford University Press

4. Flynn S V (2022) *Research Design for the Behavioral Sciences An Applied Approach*, Springer
5. Kite, M E & Whitley Jr. B E (2018) *Principles of Research in Behavioral Science*, Routledge
6. Saldana J (2021) *Coding Manual for Qualitative Researchers*, (4e) SAGE

## MS9153E QUALITATIVE AND MIXED METHODS RESEARCH

Pre-requisites: Nil

L	T	P	O	C
4	0	0	8	4

**Total Lecture Sessions: 52**

### Course Outcomes:

CO1: Compose individual qualitative research philosophy by critically evaluating and comprehending the philosophical underpinnings of qualitative research

CO2: Decide an appropriate methodological approach that suits a research area of inquiry

CO3: Plan for data collection, analysis and evaluation which serves the research purpose

CO4: Appraise the ethical standard adopted during the execution of research and in publishing

### Philosophy of Qualitative research:

Scope and Objective of Qualitative Research, Philosophical underpinnings in Qualitative Research, Truth, Reality and Meaning in research, Objectivist and Constructivist way of knowing, Paradigms, Versteh, emic and etic perspectives, Subjectivity and Reflexivity, Ontology and Epistemology; Positivism and post-positivism, Interpretivism, Symbolic Interactionism, Hermeneutics, Phenomenology, Critical Race Theory, Feminism Conceptualizing Qualitative Research; Research Purpose, Research Questions, Reviewing the literature, Synthesis and research purpose justification, Developing a conceptual framework

### Methodological Approaches:

Perspectives in Qualitative Research; Ethnography, Grounded Theory, Phenomenology, Narrative and Discourse Analysis, Case Study, Research Design: Sampling, Measurement, Credibility, Validity, Quantitative Research overview: Survey Method, Experiments, Modelling and simulation research. Mixed Methods: Sequential Exploratory; Sequential Explanatory; Concurrent Design; Ethical considerations

### Qualitative Data collections and Analysis:

Data Collection Methods: Primary and Secondary sources; Recruiting participants, Interviews, Observations, Group Discussions, Non-textual data, Preparing transcripts, Data Analysis: Inductive Analysis, Coding, Pattern Identification, Theme Generation, Tools for QDA, Proposition building

### Publishing and Ethics in Qualitative Research:

Structuring a qualitative research paper, APA style, MLA style, Reference Management tools, Writing, presenting and publishing,

### References:

1. Bhattacharya, K (2017) *Fundamentals of Qualitative Research A Practical Guide*, Routledge
2. Saldana J (2011) *Fundamentals of Qualitative Research*, Oxford University Press
3. Adu P (2019) *A Step-by-Step Guide to Qualitative Data Coding*, Routledge
4. Saldana J (2021) *Coding Manual for Qualitative Researchers*, (4e) SAGE
5. Braun V & Clarke V (2013) *Successful Qualitative Research: a practical guide for beginners* SAGE
6. Tashakkori, A, Johnson, R B & Teddlie, C (2020) *Foundations of Mixed Methods Research* (2e) SAGE

7. Cresswell, J W & Clark, V L P (2017) *Designing and Conducting Mixed Methods Research* (3e)  
SAGE

## MS9190E GENDER ECONOMICS

**Pre-requisites: Nil**

L	T	P	O	C
3	0	0	6	3

**Total Hours: 39**

### **Course Outcomes:**

CO1: Develop fundamental knowledge in theoretical concepts in the area of gender economics

CO2: Develop models to analyse economic phenomena of gender inequality in the labour market

CO3: Learn various practices of assessing gender development in national and international context

CO4: Analyse the gender policies and contrast it with the country specific data

### **Theories of Gender Economics**

The subject of gender economics. Morgan's anthropological theory - Evolution of patriarchal society, Gender budgeting. Global demographic changes and impact on gender status. Gender related indices: Gender Development Index (GDI), Gender Empowerment Measure (GEM), Gender Inequality Index (GII). Gender critique-neo classical household theory. Bargaining model. Human capital theory. Work and family balance. Capability theory: Applications to gender. Sen's contributions to gender.

### **Labour Market, Gender Equality and Economic Growth**

Impact of economic growth on gender (in-)equality. Impact of gender equality on economic growth and socio-economic development. Women's contribution to GDP. Inequality in the labour market: entry into and exit from the labour market. Models of gender inequality in the labour market. Factors in wage disparities.

### **Gender Equality and Human Development and Policies**

Objectives and methods of gender policy. Main gender issues in socio-economic development in developed countries and developing countries. Regional particularities of gender policy. Gender issues in the Millennium Development Goals. International organisations and their role in gender studies and gender policy implementation. Indicators of gender differences in socio-economic development. Measuring gender inequality in human development.



## References:

1. Hoffman, S.D., & Averett S.L., (2016). *Women and the Economy: Family, Work, and Pay*, 3<sup>rd</sup> Edition, Palgrave.
2. Sen, A., (2007). *Capabilities, Freedom and Equality: Amartya Sen's work from a Gender perspective*, Oxford University Press.
3. Jacobsen, J.P., (2007). *The Economics of Gender*, 3<sup>rd</sup> Edition, Blackwell Publishing.
4. Mukesh, E., (2020)., *Why Gender Matters in Economics?*, Princeton University Press.
5. Lourdes, B., Berik, G., & M.S. Floro. (2015)., *Gender, Development, and Globalization: Economics as if all people mattered*, Routledge.
6. Fahle, S., & K. McGarry., (2016). Women Working Longer: Labor Market Implications of Providing Family Care. *National Bureau of Research Conference Paper*.
7. Blau, F., & Kahn, L. (2017.) The gender wage gap: Extent, trends, and Explanations? *Journal of Economic Literature*, 55(3), 789-865.
8. Kunze, A. (2017). The gender wage gap in developed countries. *IZA Discussion Paper No. 10826*.
9. Olivetti, C & Barbara, P. (2008). Unequal pay or unequal employment: A cross-country analysis of gender gaps. *Journal of Labor Economics*, 26, 621-654.
10. Gender Report: Building Bridges for Gender Equality 2019, *UNESCO*. Retrieved from: <https://unesdoc.unesco.org/ark:/48223/pf0000368753>.
11. .Annual Report 2019-20. *Ministry of Women and Child Development, Government of India*. Retrieved from: [https://wcd.nic.in/sites/default/files/WCD\\_AR\\_English\\_2019-20.pdf](https://wcd.nic.in/sites/default/files/WCD_AR_English_2019-20.pdf).
12. United Nations-Human Development Report 2020 -The Next Frontier: Human Development and the Anthropocene, *United Nations Development Programme*. Retrieved from: [http://hdr.undp.org/sites/all/themes/hdr\\_theme/country-notes/UGA.pdf](http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/UGA.pdf).
13. Women and Men in India 2020. Ministry of Statistics and Programme Implementation, Government of India. Retrieved from [http://mospi.nic.in/sites/default/files/reports\\_and\\_publication/statistical\\_publication/Women\\_Men/mw20/latestmen.pdf](http://mospi.nic.in/sites/default/files/reports_and_publication/statistical_publication/Women_Men/mw20/latestmen.pdf).
14. Global Gender Gap Report 2021. *World Economic Forum*. Retrieved from: <http://reports.weforum.org/global>.
15. Women, Business and the Law, 2021. *World Bank*. Retrieved from: <https://openknowledge.worldbank.org/handle/10986/35094>.

## MS91002E ECONOMICS OF INFORMATION: STRUCTURE, STRATEGY AND POLICY

**Pre-requisites: Nil**

L	T	P	O	C
3	0	0	6	3

**Total Hours:39**

### **Course Outcomes:**

CO1: Develop fundamental knowledge about theoretical concepts in Economics of Information

CO2: Learn and model the economic phenomena of effect of information asymmetries

CO3: Analyse the economic impacts of information technology in the economy

CO4: Analyse the policy framework in adoption of Information Technology in India

### **Information Economics: Overview and Theories**

Introduction to Information economics -perfect and imperfect information- The Use of Knowledge in Society- Hayek, Lerner, Koopmans, Hurwicz, Stigler-Pricing information- information asymmetry- uncertainty and risk- contract theory -signalling-screening-second degree price discrimination-aggregation-bundling-The principal Agent problem -Moral hazard- selection hazard-(adverse/advantageous)- hidden information problems, monopolistic screening-Concept, lemons problem- game theoretic approach- industrial organisation-information goods--Shapiro-Varian's network effects

### **Evolution of Information Economics**

The contributions of the Economics of Information to twentieth century economics -Information and communication Technology (ICT) and organizational performance; Innovation and productivity in the Information Age-The Information Economy, Investing in the IT that makes a competitive difference, network economies of scale-two sided markets- information goods--Shapiro-Varian's network effects

### **Information Economy in India - Stakeholders and Policy**

Overview of economic activities of government- institutions, technology; policies and performance- government intervention and policy framework to stimulate generation and diffusion of innovation, the role of combinatorial innovation in economy- ICT, e-governance and Artificial intelligence (AI) implementation – National Policy on Information Technology, ICT adoption and digitisation in India, economic impacts and challenges- emerging ICT policies and regulations.

## References

1. Brynjolfsson, E., & Saunders, A., (2009). *Wired for Innovation: How Information Technology is Reshaping the Economy*. Cambridge, MA: MIT Press.
2. Shapiro, C., & Varian, H., (1998). *Information Rules: A Strategic Guide to the Network Economy*. Cambridge, MA: Harvard Business School Press.
3. Tirole, J., (1988). *The Theory of Industrial Organization*. Cambridge, MA: MIT Press, 1988, chapter 3, pp. 133-152.
4. Varian, H., Joe F., & Shapiro, C., (2005). *The Economics of Information Technology: An Introduction*. Cambridge University Press.
5. Varian, H., (2019), *Microeconomic Analysis*, ch.25, W W Norton & Company.
6. Das, K., & Sagara, H. (2017). *State and the IT Industry in India*. *Economic & Political Weekly*, 52(41), 57.
7. Jensen, R. (2008). *The Digital Divide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector*. *Quarterly Journal of Economics* 122(3): 879-924.
8. Government of India, *Economic Survey* (Various years)).
9. Milgrom, P. and J. Roberts (1982). *Limit Pricing and Entry under Incomplete Information: An Equilibrium Analysis*. *Econometrica* 50, 443-59.
10. Stiglitz, Joseph E. (2000). The Contributions of the Economics of Information to Twentieth Century Economics. *Quarterly Journal of Economics*, 115(4): 1441-78.
11. Strielkowski, W., Gryshova, I., & Kalyugina, S. (2017). *Modern Technologies in Public Administration Management: A Comparison of Estonia, India and United Kingdom*. *Administration & Public Management Review*, (28).
12. United Nations Development Programme, *Human Development Report 2020*, Palgrave Macmillan (2020).
13. Varian, H. (2000). Buying, Sharing and Renting Information Goods. *The Journal of Industrial Economics*, 18(4).

## MS9193E Applied Statistics for Decision Making

L	T	P	O	C
4	2	1	4	4

**Pre-requisites: Basic Statistics**

**Total Lecture Sessions : 52**

**Course Outcomes:**

CO1: Develop a strong foundation in statistical inference techniques.

CO2 : Gain practical experience in applying statistical techniques to real-world scenarios.

CO3 : Develop critical thinking skills for evaluating and interpreting statistical results.

CO4: Apply statistical concepts to real-world scenarios through practical exercises.

CO5: Apply the logic behind running various statistical techniques in different real life examples

### **Statistics Overview and Data Visualisation and Summarisation**

Overview of statistics and its applications, Types of data and measurement scales, Variables, Data collection methods and sampling techniques, Descriptive statistics and data visualisation, Graphical representation of data: histograms, bar charts-simple and clustered bar charts, pie charts, box and whisker plots, scattered plots, comparing distribution- cautions about graphing- Tabular presentation of data: frequency tables, cross-tabulations; Data summarization: measures of central tendency-mean, median, mode; skewness, kurtosis; Measures of dispersion-range-variance-standard deviation- Outliers-Spotting bias, Standard error-Expected value of the mean-central limit theorem

### **Interpretation of Probability Distributions and Estimation**

Basics of probability theory, Probability rules and calculations, Common probability distributions-discrete and continuous distribution (binomial, Poisson, normal), Applications of probability in real-life scenarios-Normal distribution and its applications-Properties, Empirical Rule, Standard normal distributions and standard scores, Introduction to statistical inference, Estimation: point estimates and confidence interval, Hypothesis testing: null and alternative hypotheses, p-values, Statistical significance

### **Applications of Parametric and Non-parametric Methods**

Inferential statistics- Interpreting and communicating statistical results; Applications and Interpretation of correlation coefficients-Pearson's, Spearman's Rank correlation, Phi correlation coefficient, Point biserial correlation coefficient; t Tests-Independent sample t Tests- Paired or dependent samples t Test, One-way Analysis of variance, Factorial analysis of variance, Repeated measures Analysis of variance, Regression, Experimental designs, Randomised experiments, Quasi experiments, Evaluating experiments-Reliability,

Validity-Internal validity and external validity; Analysing data when data is not normal-Non parametric test- Mann Whitney test- Wilcoxon signed rank test, Kruskal Wallis test; Chi-Square test of independence.

### **Wrapping up: Steps in Statistical modeling and cautions**

Importance of statistics- Building statistical models-avoiding common pitfalls in the choice of methods and interpretation, Wrapping up of bivariate statistical methods and choice of methods under different scenario- Common regression mistakes-correlation versus causation-reverse causality-omitted variable bias, multicollinearity; Statistical significance versus practical significance; Wrapping up of various nature or scale of data and choice of statistical methods-Practical sessions of real life data and applications of various statistical models.

### **References:**

1. Newbold,P.,Carlson.W., & Thorne,B.,(2020). *Statistics for Business and Economics*,9<sup>th</sup> Edition, 2020,Pearson.
2. Levin,R.I., & Rubin,D.S.,(2013). *Statistics for Management*, Edition, Pearson.
3. Urdan,T.C., (2010). *Statistics in Plain English*,3<sup>rd</sup> Edition, Routledge.
4. Wheelan,C., (2013). *Naked Statistics*, Norton.
5. Field,A.,(2012). *Discovering Statistics using IBM Statistics*,4<sup>th</sup> Edition, Sage.

## MS9160E ADVANCED KNOWLEDGE MANAGEMENT

Pre-requisites: **NIL**

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### **Course Outcomes:**

CO1: Understand advanced concepts and theories in knowledge management.

CO2: Evaluate the role of artificial intelligence in knowledge creation, capture, and dissemination.

CO3: Design and implement AI-driven knowledge management systems.

CO4: Analyze the impact of AI on organisational knowledge processes and performance.

### **Foundations of Advanced Knowledge Management**

Overview of knowledge management principles and models - Knowledge creation and innovation - Knowledge capture and codification - Knowledge Representation - Knowledge sharing and dissemination - Thought leadership - Transformation Leadership - Innovation

### **Artificial Intelligence in Knowledge Management**

Introduction to AI and its applications in knowledge management - Natural language processing for knowledge extraction and organisation - Machine learning for knowledge discovery and recommendation, Semantic technologies and ontologies for knowledge representation

### **AI-Driven Knowledge Management Systems**

Designing AI-driven knowledge management architectures- Developing chatbots and virtual assistants for knowledge support - Deep learning for knowledge analytics and decision-making -Integration of AI with existing knowledge management systems - Implications of AI in Knowledge Management - Ethical considerations in AI-driven knowledge management - Organizational culture and change management in AI adoption - Evaluating the impact of AI on knowledge processes and organisational performance - Future trends in AI and knowledge management: Generative AI - Generalize Pre-Trained Transformer (GPT).

## References:

1. Dennett, D. C. (2017). *From Bacteria to Bach and Back—The Evolution of Minds* (1st edition). W. Norton & Company.
2. Domingos, P. (2015). *The Master Algorithm: How the Quest for the Ultimate Learning Machine Will Remake Our World* (1st edition). Basic Books.
3. Feigenbaum. (1983). *The Fifth Generation: Artificial Intelligence and Japan's Computer Challenge to the World*. Addison Wesley Longman Publishing Co.
4. Kelly, K. (2016). *The Inevitable: Understanding the 12 Technological Forces That Will Shape Our Future* (1st edition). Penguin.
5. Olson, D. L., & Delen, D. (2008). *Advanced Data Mining Techniques*. Springer Science & Business Media.
6. Segaran, T. (2007). *Programming Collective Intelligence: Building Smart Web 2.0 Applications* (1st edition). O'Reilly Media.
7. Vorbeck, J., Mertins, K., & Heisig, P. (Eds.). (2003). *Knowledge Management: Concepts and Best Practices* (2nd ed. 2003 edition). Springer-Verlag Berlin and Heidelberg GmbH & Co. K.

## MS9161E STATISTICAL ANALYSIS USING R

Pre-requisites: **NIL**

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### Course Outcomes:

CO1: Understand fundamental concepts and principles of statistical analysis.

CO2: Apply statistical techniques using R for data exploration and analysis.

CO3: Interpret and communicate statistical results effectively.

CO4: Apply advanced statistical modelling techniques for research data analysis.

### Introduction to R and Data Preparation

Introduction to R programming language and its features - R and R integrated development environments - R packages - CRAN - R syntax, data types, and basic operations - Data import, cleaning, and transformation in R - Exploratory data analysis and data visualisation - swirl package

### Descriptive Statistics and Inferential Analysis

Measures of central tendency and dispersion - Probability distributions and sampling techniques - Hypothesis testing and p-values - Confidence intervals and effect size

### Regression Analysis and Multivariate Techniques

Simple linear regression and multiple regression - Model diagnostics and interpretation of regression results - Analysis of variance (ANOVA) and analysis of covariance (ANCOVA) - Principal component analysis (PCA) and factor analysis - Advanced Topics in Statistical Modeling - Generalized linear models (GLMs) - Survival analysis and time-to-event data - Longitudinal data analysis - Machine learning techniques in R - Developing new packages

### References:

1. Dalgaard, P. (2008). *Introductory Statistics with R*. Springer Science & Business Media.
2. Field, A., Miles, J., & Field, Z. (2012). *Discovering Statistics using R* (1st edition). SAGE Publications Ltd.
3. Fox, J., & Weisberg, S. (2011). *An R Companion to Applied Regression*. SAGE Publications.



4. James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An Introduction to Statistical Learning* (Vol. 103). Springer, New York. <https://doi.org/10.1007/978-1-4614-7138-7>
5. Matloff, N. (2011). *The Art of R Programming: A Tour of Statistical Software Design* (1st edition). No Starch Press, US.
6. Teetor, P. (2011). *R Cookbook: Proven Recipes for Data Analysis, Statistics, and Graphics*. O'Reilly Media, Inc.
7. Wickham, H. (2009). *ggplot2: Elegant Graphics for Data Analysis*. Springer. <https://doi.org/10.1007/978-0-387-98141-3>
8. Wickham, H., & Grolemund, G. (2017). *R for Data Science: Import, Tidy, Transform, Visualize, and Model Data* (First Edition). Shroff/O'Reilly.

## MS9140E GREEN MARKETING

Pre-requisites: **NIL**

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### Course Outcomes:

CO1: Demonstrate a comprehensive understanding of the principles and concepts of green marketing.

CO2: Analyse and evaluate the effectiveness of green marketing strategies in various contexts.

CO3: Apply eco-design principles to develop sustainable and environmentally friendly products.

CO4: Develop and implement green marketing strategies that align with business goals and sustainability objectives.

### Introduction to Green Marketing

Understanding Green Marketing - Definition and principles, Importance and benefits, Consumer attitudes and behaviors - Green Consumer Segmentation - Categorizing green consumers, Motivations and values, Targeting and positioning strategies -Green Product Development - Eco-design principles, Sustainable packaging, Life cycle assessment.

### Strategies for Green Marketing

Green Branding and Communication - Building a green brand, Effective communication, Advertising and PR - Green Pricing and Distribution - Pricing strategies, Sustainable supply chain, Distribution channels - Green Marketing Campaigns and Innovation - Impactful campaigns, Digital marketing and social media - Green innovation.

### Challenges and Future Trends in Green Marketing

Consumer Behavior and Greenwashing - Consumer scepticism, Trust and credibility, Ethical considerations - Regulatory and Legal Environment - Environmental regulations, Green certifications, Legal challenges - Sustainable Marketing for Global Impact - International perspectives, Sustainable development goals, Emerging trends.

## References

1. Martin, D. M., & Schouten, J. (2011). *Sustainable marketing* (p. 264). Pearson Prentice Hall.
2. Grant, J. (2009). *Green marketing. Il manifesto*. Francesco Brioschi editore.
3. Fuller, D. A. (1999). *Sustainable marketing: Managerial-ecological issues*. Sage Publications.

## MS9141E CONTEMPORARY ISSUES IN MARKETING

Pre-requisites: **NIL**

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### **Course Outcomes:**

CO1: Apply marketing principles and strategies to analyze and solve real-world problems related to contemporary marketing issues.

CO2: Critically examine and assess the ethical implications of marketing practices and initiatives related to gender inclusivity, brand activism, and sustainable marketing.

CO3: Develop and design comprehensive marketing strategies and campaigns that integrate contemporary marketing approaches and address specific marketing challenges.

### **Marketing in the Digital Age**

Digital Transformation and Customer Experience - Digital marketing trends, Personalization and customization, Omnichannel marketing - Data-driven Marketing and Analytics - Customer insights and targeting, Marketing analytics, Ethical data usage - Gender Inclusivity Marketing and Brand Activism - Challenging gender stereotypes, Gender-inclusive campaigns, Brand activism

### **Sustainable and Socially Responsible Marketing**

Sustainable Marketing Practices - Green marketing, Ethical sourcing, Sustainable product development - Socially Responsible Marketing and Brand Purpose - Corporate social responsibility, Cause-related marketing, Brand purpose - Marketing in the Age of Social Media and Influencers - Social media marketing, Influencer partnerships, Online reputation management

### **Global Marketing and Market Expansion**

Globalization and Cultural Considerations - Global market entry strategies, Cultural intelligence, Diversity in marketing - Emerging Trends in Consumer Behavior - Changing consumer behaviour, Generational

marketing, Social and cultural influences - Marketing Innovation and Disruption - Innovative marketing technologies, Disruptive marketing strategies, Navigating market disruptions

**References:**

1. Boone, L. E., & Kurtz, D. L. (1995). *Contemporary marketing*. Harcourt Brace College Publishers.
2. Abeysekera, N., Kotler, P., Kartajaya, H., & Setiawan, I. (2020). *Marketing 4.0: Moving from Traditional to Digital*, Wiley
3. Kartajaya, H., Setiawan, I., & Kotler, P. (2021). *Marketing 5.0: Technology for humanity*. John Wiley & Sons.

## MS9142E QUALITATIVE RESEARCH METHODS IN MARKETING

Pre-requisites: **NIL**

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### **Course Outcomes:**

CO1: Demonstrate comprehension of the various qualitative research approaches and methods used in marketing research and their underlying theoretical foundations.

CO2: Apply qualitative research techniques to design and conduct marketing research studies.

CO3: Critically evaluate and analyze qualitative research findings, identify patterns and themes, and make informed recommendations.

### **Introduction to Qualitative Research Methods in Marketing**

Nature of Qualitative Research - Research Paradigms and Philosophies - Qualitative Research Design - Sampling Techniques in Qualitative Research - Data Collection Methods in Qualitative Research

### **Key Approaches and Methods in Qualitative Research**

In-depth Interviews - Focus Groups - Observational Research – Ethnography - Case Studies - Content Analysis - Grounded Theory - Phenomenology

### **Data Analysis in Qualitative Research**

Qualitative Data Analysis Process - Coding and Categorization Techniques - Interpretation and Themes Identification - Qualitative Software Tools for Data Analysis - Validity and Reliability in Qualitative Research - Triangulation and Member Checking - Reporting and Presenting Qualitative Findings

## References

1. Kozinets, R., Fischer, E., & Belk, R. W. (2012). Qualitative consumer and marketing research. *Qualitative Consumer and Marketing Research*, 1-240.
2. Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.
3. Carson, D., Gilmore, A., Perry, C., & Gronhaug, K. (2001). *Qualitative marketing research*. Sage.

## MS9184E INTRODUCTION TO CHILDHOOD STUDIES

Pre-requisites: NIL

**Total Lecture Sessions: 39**

L	T	P	O	C
3	0	0	6	3

### Course Outcomes:

CO1: Critically examine research in childhood studies and literature that reflect on children and childhood(s).

CO2: Assess the impact of cultural biases and social structure on children's experiences and opportunities.

CO3: Design and propose research in childhood studies to articulate new perspectives in the domain.

### History and Early Theories

Introduction to Historical Perspectives on Childhood - Conceptualisation of Childhood - Childhood As a Social Construct - Philippe Ariès - Judith Butler: Gender Performativity - Developmental Theories: Jean Piaget, Lev Vygotsky - Ecological Context on Childhood - Social Learning: observation, imitation, and reinforcement - United Nations Convention on the Rights of the Child - Gerison Lansdown - Childhood experiences: Allison James, Alan Prout - Participation and Agency Issues in Childhood - Adulthood - Adult-Child Relationship - Abuse and Neglect

### Childhood: In Media and Society

Influence of Media in constructing childhood(s): innocence and vulnerability - creative and imaginative aspects of childhood - play and storytelling - children's literature, animated films, and TV shows - Media literacy and critical consumption - Child Identity - Coming-of-Age stories - Self-discovery - Issues of 'Autonomy' - Family as a 'space' - Sibling dynamics - Depictions of parent-child relationships - Social Challenges and Childhood

### Factors Influencing Childhood(s)

Education and Childhood: traditional models and alternative approaches - Role Play - Creative Learning - Contextualising "Innocence" in Education - Gender and Race Intersectionality - Gender Association and Its Effects - Gender Stereotypes - Societal Expectations - Race and Ethnic Identities - Privilege and Inequality in Childhood Contexts - Globalisation and its Impact on Childhood - Migration, displacement - Refugee Children - Childhood Trauma - Technology and Digital Childhood: screen time, online safety, virtual interactions, integration of Technology

### Approaches to Understanding Childhood(s)

Crisis of Childhood - Cross-disciplinary Approaches to childhood studies - Ethical Considerations in Childhood Research - Documenting Childhood - Case Studies in Childhood Studies - Designing Interviews for Children - Studies in Early Childhood Education



**References:**

1. Donaldson, M. C. (1987). *Children's minds*. Fontana Press.
2. Dyer, H. (2020). *The Queer Aesthetics of Childhood: Asymmetries of Innocence and the cultural politics of child development*. Rutgers University Press.
3. Edwards, C., Gandini, L., & Forman, G. (1996). In *The hundred languages of children: The Reggio Emilia Approach to early childhood education*. essay, Ablex Publishing Corporation.
4. Elkind, D. (2010). *The hurried child: Growing up too fast too soon*. Da Capo Press.
5. Feuerstein, A., & Nolte-Odhiambo, C. (2019). In *Childhood and pethood in literature and culture: New perspectives in childhood studies and animal studies*. essay, Routledge.
6. Knowles, G. (2009). *Ensuring every child matters: A critical approach*. SAGE.
7. Lareau, A. (2014). *Unequal childhoods: Class, race, and Family Life*. University of California Press.
8. Paley, V. G., & Coles, R. (1991). *The boy who would be a helicopter: The uses of storytelling in the classroom*. Harvard University Press.
9. Piaget, J. (2020). *The child's conception of the world*. Routledge.
10. Smith, C., & Greene, S. (2015). *Key thinkers in childhood studies*. Policy Press.

## MS9185E INTRODUCTION TO ENVIRONMENTAL HUMANITIES

Pre-requisites: NIL

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### Course Outcomes:

CO1: Use environmental constructs for discourse and engage with communities.

CO2: Analyse and interpret narratives and art forms using environmental values.

CO3: Critique and propose alternative frameworks by integrating environmental humanist perspectives.

### Environmental Humanities : Key Concepts

Environmental Humanities: History, Definition and Key Concepts - Interdisciplinary. Scope - Interdependence of Nature, Culture and Society - Environmental Ethics - Ethical Frameworks for Environmental Issues - Environmental Justice - Environment and Literature - Ecocriticism - Ecocritical Movement - Humans and Environment

### Contemporary Issues and Global Concerns

Contemporary Environmental Issues and Debates - Environmental Activism - Environmental Aesthetics - Protest Art and Activism - Social Mobilisation and Movements - Environment in Alternate and Popular Cinema - Environment and War - Landscape and Culture - Identities and Environment - Sense of Belonging - Ecofeminism - Gender, Ecology and Social Justice - Gendered Experiences of Climate Change and Crisis

### Environmental Humanities :Policies and Future

Environmental Degradation and Policies - International Agencies and Collaborations for Environment - Climate Fiction and Narratives - Case Studies on Environmental Education - Environmental Initiatives - Sustainable Futures - Environmental Imaginaries - Utopia and Dystopia - Resistant Communities - Posthumanism - Anthropocene

### References:

1. Buell, L. (1995). *The Environmental Imagination: Thoreau, nature writing and the formation of American culture*. Harvard University Press.
2. Cronon, W. (1997). *Nature's metropolis: Chicago and the Great West*. W.W. Norton.
3. Glotfelty, C., & Fromm, H. (2009). *The ecocriticism reader: Landmarks in literary ecology*. The University of Georgia Press.
4. Hiltner, K. (2015). *Ecocriticism: The essential reader*. Routledge.
5. Krech, S. (2001). *Ecological indian: Myth and history*. Norton.
6. Merchant, C. (1980). *The death of nature: Women, ecology, and the Scientific Revolution*.
7. Nixon, R. (2013). *Slow violence and the environmentalism of the poor*. Harvard University Press.
8. Tsing, A. L. (2021). *The mushroom at the end of the world: On the possibility of life in capitalist ruins*. Princeton university press.

## MS9182E FOOD AND CULTURE

**Pre-requisites: Nil**

L	T	P	O	C
3	0	0	6	3

**Total Sessions: 39**

### Course Outcomes

CO1: Evaluate foundational concepts and theories in the study of food and culture.

CO2: Develop critical thinking skills in the analysis of food production and consumption practices.

CO3: Critically examine the relationship between food practices, cultural beliefs and social difference.

CO4: Interpret the relationship between food practices and historical and contemporary processes of colonialism and globalization.

CO5: Develop well researched arguments to justify and debate existing and emerging practices in relation to food and culture.

### Introduction to Food and Culture

Food meaning and symbolism -Semiotics of Food - Power and Pleasure of Consumption- Good food, bad food - Food and Power-The Spice Route - History of Sugar-History of Spice-Food and Customs- Food and Cultural Identity- Recipes, recipebooks, cuisines, national cuisines- Reading Cookbooks and Recipes to understand Culture- Gastropolitics.

### Food and Globalization

Food and Foodways-Globalization and the changing food scene- Good oil, bad oil- McDonaldization-obesity and hunger- Ethical Consumption - local foods, global outlook - Food tourism - authentic v/s exotic-Food and Popular Culture-Master Chef, Social Media, Movies, Cooking channels

### Political and social implications of Food and Foodways

Food and Identity- Food and Gender- Food and Family: eating out or eating in, domestic kitchens, restaurant culture- Food and Religion- Food and Caste -Food and Domesticity- Food and Labour- Food and Memory-Food and Migration- Political Economy of Food.

### References

1. Appadurai, A. (Ed.). (1988). *The social life of things*. Cambridge University Press.
2. Cheung S. C. H. Tan C. B. & Tam S. M. (2007). *Food and foodways in Asia*. Routledge.
3. Counihan C. & Van Esterik P. (1997). *Food and culture : A Reader*. Routledge.
4. DeVault M. L. (1994). *Feeding The Family : The Social Organization of Caring as Gendered Work* (Paperback). University of Chicago Press.

5. Douglas, Mary. "Deciphering a Meal.", *Implicit Meanings*. Routledge, 2010. ISBN: 9780415606738.
6. Mintz, S. W. (1986). *Sweetness and Power*. Penguin Books.
7. Pollan, Michael. (2007). *The Omnivore's Dilemma: A Natural History of Four Meals*. New York :Penguin.

## MS9183E INTRODUCTION TO TRANSLATION STUDIES

**Pre-requisites: Nil**

L	T	P	O	C
3	0	0	6	3

**Total Sessions: 39**

### **Course Outcomes:**

CO1: Employ a range of contemporary theoretical methods to analyse the process of translation.

CO2: Evaluate the issues and problems in the process of translating a text.

CO3: Assess contemporary research in translation theory and praxis.

CO4: Formulate an independent approach to critical analysis and evaluation of translated texts.

### **Module 1: Theories of Translation (12 Lecture Sessions)**

Communicative & Semantic– Literal & Free translation–Nature of Meaning–Symbolic meaning–communicative meaning– Linguistic Meaning – Referential & Emotive Meaning– inclusive language–foreignization and domestication.

### **Module 2: Process of Translation (13 Lecture Sessions)**

Expressive, Informative & Vocative–Interlinear, Intralinear, Litersemiotic–Equivalence- Formal, Dynamic, Linguistic, Paradigmatic, Syntagmatic, Stylistic –Transference, Transliteration, Transcreation – untranslatability - Role of a translator- visibility, ethics, and sociology-Translator’s invisibility- translation as transcreation.

### **Module 3: Translation and Culture (14 Lecture Sessions)**

Post-colonial translation studies- feminism and translation- translation and identity- nation and translation- translating the other- Indian literature in translation-Indian English writing and translation; translating India-translation and publishing.

### **References:**

1. Bassnett S. & Lefevere André. (1990). *Translation History and Culture*. Pinter.
2. Bassnett S. (2014). *Translation*. Routledge.
3. Bassnett S. (Editor) E. & Trivedi H. (2012). *Postcolonial Translation : Theory and Practice*. Taylor and Francis.
4. Bermann S. & Porter C. (2014). *A Companion to Translation Studies* (First). Wiley-Blackwell.
5. Cronin M. (2006). *Translation and identity*. Routledge.
6. Richman P. (1991). *Many Rāmāyaṇas : The Diversity of a Narrative Tradition in South Asia*. University Of California Press.
7. Venuti L. (2019). *Rethinking translation : Discourse Subjectivity Ideology*. Routledge.

## MS9120E TECHNOLOGY AND INNOVATION MANAGEMENT

Pre-requisites: NIL

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### **Course Outcomes:**

CO1: Analyze the process and factors that govern the technology evolution and propagation

CO2: Understand the life cycles of technology and audit the strengths and weakness of the technological strength

CO3: Devise strategies for technology acquisition based on the audited strengths

CO4: Develop product and process and evaluate the technology for financial sustainability

### **Introduction to Technology and Product Innovation**

Understanding Management of Technology, Key concepts – importance – issues. Process of technological change – Process versus product innovation in the generic product technology; Types of innovation, innovation technology evolution, Dominant design, Diffusion – methods of diffusion, factors governing diffusion, Expeditionary marketing

### **Management of Technology**

Managing technology: What is distinct, disruptive & strategic - Core Competence/Core Capability, Marquis anatomy of successful Innovation, strategic firm fit audit – Technology Market Matrix / Portfolio theory technology life cycles – Technology and competition, technology acquisition; Integration of strategic planning and technology planning - Key performance factors for technology management

### **Strategic Management of Technological Innovations**

Technology Strategy: Technology intelligence; collaborative mode - Appropriation of technology - Deployment in new products; simultaneous engineering; Development in the value chain - Technology evaluation and financing – changing role of R & D, Management of manufacturing technology

**References:**

1. Narayanan, V. K. (2001). *Managing technology and innovation for competitive advantage*. Pearson Education India.
2. Khalil, T., & Ravishankar. (2017). *Management of technology: The key to competitiveness and wealth creation* (2nd ed.). McGraw Hill Education.
3. Burgelman, R., Christensen, C., & Wheelwright, S. (2001). *Strategic management of technology and innovation*. Tata McGraw Hill.
4. Schilling, M. A. (2010). *Strategic management of technical innovation* (3rd ed.). McGraw Hill.

## MS9121E COMPUTATIONAL OPERATIONS RESEARCH

**Pre-requisites:** NIL

L	T	P	O	C
3	0	0	6	3

**Total Lecture Sessions: 39**

### **Course Outcomes:**

CO1: Understanding the mathematical foundations for optimization problems

CO2: Acquire knowledge on geometric and mathematical interpretation of Simplex Method

CO3: Learning the decomposition principle and the column generation method for solving difficult to solve combinatorial problems

CO4: Application of specialized simplex algorithms to solve the network structured linear programming problems

### **Linear Algebra, Convex Analysis, Polyhedral Sets and Simplex method**

Introduction to Linear Programming: Geometric Solution, Requirement Space – Vectors – Matrices – Simultaneous Linear Equations – Convex sets and Concave Functions – Polyhedral sets: Extreme Points, Faces, Directions, Extreme Directions, Geometric insights – Representation of Polyhedral sets – Geometric motivation of Simplex method – Algebra of Simplex method – Block pivoting – Initial Basic feasible solution – comparison of Big-M method and Two-phase method – Single artificial variable technique – Degeneracy – Cycling – Stalling – Two Cycling prevention rules – Revised Simplex method

### **Decomposition Principle and Column Generation Method**

Decomposition Principle: Numerical Example on Dantzig-Wolfe decomposition technique, Case of Unbounded region, Block diagonal or Angular structure, Duality and Relationships with other decomposition procedures including Lagrangian Relaxation and Bender's decomposition – Column generation method for Cutting stock problem

### **Network Flow Problems**

Simplex method for Transportation and Network flow problem – Polynomial successive shortest path problem for Assignment problems – Polynomial Shortest path algorithm for networks with Arbitrary costs – Characterization of a basis for the multicommodity minimal cost flow problem – Synthesis of Multiterminal flow networks – Out-of-Kilter algorithm for minimal cost network problem

### **References:**

1. Bazaraa, M. S., Jarvis, J. J., & Sherali, H. D. (2014). *Linear programming and network flows* (2nd ed.). Wiley India Pvt. Ltd.
2. Srinivasan, G. (2017). *Operations research: Principles and applications* (3rd ed.). PHI Learning.



## MS9180E THEORETICAL FOUNDATION FOR ENGLISH LANGUAGE TEACHING

**Pre-requisite: Nil**

L	T	P	O	C
4	0	0	8	4

**Total Lecture Sessions: 52**

### **Course Outcomes:**

CO1: Demonstrate knowledge of various English language teaching approaches and methods

CO2: Categorize various factors in second language acquisition

CO3: Distinguish between various language acquisition theories and models

CO4: Assess contemporary research in second language acquisition

### **English Language Teaching Approaches and Methods**

English Language Teaching- Introduction; Language Skills; Approaches and Methods- Grammar Translation Method; Direct Method; Audio-lingual Method; The Silent Way; Communicative Language Teaching; Task Based Language Teaching; Cognitive Interactionist Approach; Community Language Learning; Technology Assisted Language Teaching and Learning; Eclectic Approach; The Common European Framework of Reference (CEFR)

### **Second Language Acquisition**

Introduction to Second Language Acquisition (SLA); Factors Affecting SLA- Age, Aptitude, Socio-psychological Factors: Motivation, Attitude, Personality, Cognitive Style; Learning Strategies; Learner Autonomy; Learner Self Beliefs

### **Theories in SLA**

Nativist Theories; Chomsky's Universal Grammar; Krashen's Hypotheses; Swain's Output Hypothesis; Schumann's Pidginisation Hypothesis and Acculturation Model; Critical Period Hypothesis, Patten's Input Processing

### **SLA Research**

The Place and Scope of SLA Research concerning both route and rate of L2 development; Quantitative versus Qualitative Methodologies in SLA research, Types of Data Analysis: Contrastive Analysis, Error Analysis; Performance Analysis; Discourse Analysis; linguistic to cognitive models and social/interactionist models; relationship between instruction and L2 development; Audio-lingual method; Communicative Language Teaching; Fossilization; Grammar-translation method; Immersion; Interlanguage and Transfer Methods in SLA

## References:

1. Ellis, R. (2008). *Second Language Acquisition*, 2nd ed. Oxford: Oxford University Press.
2. Ellis, R. (2010). *SLA Research and Language Teaching*, (3rd ed.). Oxford: Oxford University Press.
3. Larsen-Freeman, D. & Anderson, M. (2011). *Techniques and Principles in Language Teaching*, 3rd ed. Oxford: Oxford University Press.
4. Larsen-Freeman, D. & Long, M. H. (1991). *An Introduction to Second Language Acquisition Research*, (1st ed.). New York: Longman.
5. Richards, J. C. & Rodgers, R. (2001). *Approaches and Methods in Language Teaching*, (2nd ed.). Cambridge: Cambridge University Press.
6. Smith, M.S. (2014). *Second Language Learning: Theoretical Foundations*, 1st ed. New York: Routledge.
7. Ur, P. (2012). *A Course in Language Teaching*, 2nd ed. Cambridge: Cambridge University Press.

## MS9181E SOUTH ASIAN LITERATURE IN ENGLISH AND TRANSLATION

**Prerequisite:** Nil

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4	0	0	8	4

**Total Lecture Sessions:** 52

### **Course Outcomes:**

CO1: Explain features of South Asian Literature

CO2: Analyse the literatures from South Asia historically, socially and culturally

CO3: Examine notions of culture, alienation and identity in South Asian context

CO4: Critique stereotypes of colonial and postcolonial South Asia

### **Introduction to South Asian Narratives**

Introduction to South Asian Writing- Discussion of canon against Commonwealth and Postcolonial Literatures- South Asia's history and culture- Oral narratives and performances- Polyglossia in South Asia- Politics of writing in English and translating into English in South Asia- Colonialism and English-Hybrid 'Englishes'- Code mixing in South Asian Writing- Tracing motifs and literary movements

### **Representation**

Diversity and difference through short stories- Cultures and religions- Representing communities, local identities and conflicts- Social realism and social change- Sacred vs Secular in literature- South Asia in "The Festival" by Akhtaruzzaman Elias (Bangladesh), "Hands" by Sharad Chhetri (Nepal), "Cracks in the Heart" by Farkhana Lodhi (Pakistan), "Desert Nymph" by Arupa Patangia Kalita (Assam), "Mehendi Bazaar" by Dalbir Chetan (Punjab), "The Transgression" by Pratibha Roy (Oriya); "Bhuvana and Planet Guru" by R Chudamani (Tamil), "The Wild Buffalo" by Piyaseeli Wijemanne (Sinhala), and "The Homecoming" by M. A. Al Asumath (Tamil, Sri Lanka)

### **Politics and History**

Politics and History- Literature of Politics and Politics of Literature- Pain and suffering in partition and civil war- Rise of new Nations- Linguistic and Ethnic identities- National Literature and Nation Building- Decolonizing literatures- Selections from *Black Margins* by Saadat Hasan Manto (Pakistan), *The Age of Kali* by William Dalrymple, and *In the Garden Secretly* by Jean Arasanayagam (Sri Lanka)

### **Margins**

Gender and Society: Margins and Centre- Gendered roles and tradition- Concerns of Modernity: Change of customs and modernising practices- Transition and Social Change- Social and Cultural dilemmas- Postcolonial, post-Soviet and post-national literature- Decolonizing English- Translation as empowering, pain and trauma- South Asia in *The Matchbox* by Ashapura Devi (Bengali, India); *Amar Meyebela (My Girlhood)* by Tasleema Nasreen (Bangladesh) and *Mottled Dawn* by Saadat Hasan Manto (Pakistan)

## References:

1. Brians, P. (2003). *Modern South Asian Literature in English*. Greenwood Press.
2. Debi, A. (2015). *Matchbox: Stories*. Hachette India.
3. Elias, A. et. al. (2003). *Twenty Stories from South Asia*, Katha Publications.
4. Farooqi, M. A. (2010). *The Oxford Anthology of Modern Urdu Literature: Fiction*. Oxford India Paperbacks.
5. Hussain, I., & Farrukhi, A. (Ed) (2007). *Short Stories from Pakistan*. Sahitya Akademi.
6. Manto, S. H. (2012). *Manto: Selected Stories*. Random House.
7. Rahman, T. (2015). *A History of Pakistani Literature in English 1947-1988*. Oxford University Press.
8. Roy, R. (2010). *South Asian Partition Fiction in English: From Khuswant Singh to Amitav Ghosh*. IIAS Publications.
9. Rushdie, S. & West, E. (Ed) (1997). *Mirrorwork: 50 Years of Indian Writing 1947-1997*. Henry Holt and Company.
10. Salgado, M. (2012). *Writing Sri Lanka: Literatures, Resistance and the Politics of Place*. Routledge.
11. Sanga, J. C. (Ed). (2004). *South Asian Literature in English: An Encyclopedia*. Greenwood Press.
12. Zaman, N. (Ed) (2010). *Contemporary Short Stories from Bangladesh*. The University Press Limited.