

National Curriculum and Credit Framework Syllabus

**M.A. in Education
w.e.f. the Academic Session : 2026-27**



Kazi Nazrul University
Asansol, Paschim Bardhaman
West Bengal- 713340

Semester-I

Course Name: **Measurement and Evaluation in Education**

Course Code: **MAEDUMC701**

Course Type: MAJOR COURSEWORK	Course Details: MC-1			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. understand the basic concepts of measurement, assessment and evaluation in education.
2. be acquainted with instructional objectives, scales of measurement, types of evaluation.
3. have in-depth knowledge in various tools and techniques of measurement and evaluation.
4. know the process of standardization of a test.
5. acquire a comprehensive understanding on the concept of reliability, validity, usability and norms.
6. acquire skills for interpreting test scores.
7. understand the recent trends in measurement and evaluation in education.

Course Content: Theory

Unit-I: Basic Concept of Measurement, Assessment & Evaluation

- Measurement in Education: Concept, Characteristics and Functions.
- Assessment in Education: Concept, Characteristics and Functions.
- Evaluation in Education: Concept, Characteristics and Functions.
- Principles of Evaluation in Education. Differences and relationships among Measurement, Evaluation and Assessment.

Unit-II: Instructional Objectives, Scales of Measurement, Types and Tools of Evaluation

- Taxonomy of Educational Objectives, Differences between Educational Objectives and Instructional Objectives.
- Scales of Measurement: Nominal, Ordinal, Interval and Ratio.
- Types of Evaluation: Placement, Formative, Summative and Diagnostic. Norm-referenced Test, and Criterion-referenced Test.
- Tools and Techniques for Measurement and Evaluation: Subjective and Objective Tests, Anecdotal Record, Schedules, Rubrics, Socio-Metric, Interview, and Observation.

Unit-III: Measuring Instruments

- Reliability: Concept and Nature, Methods of estimating Reliability, Factors influencing reliability.
- Validity: Concept and Nature, Types of Validity, Factors influencing Validity.
- Usability: Concept and Dimensions.
- Norms: Steps in developing norms and Types of norms.

Unit-IV: Construction and Standardisation of Test, Test Scores & Recent Trends in Evaluation

- Meaning of Test in Education. Characteristics of a good test.
- General Steps of Construction and Standardization of a Test; Intelligence Test, Personality Test, Motivational Test, Stress and Anxiety Test, Impulsiveness, Frustration and Aggression Test, and Creativity Test.
- Methods of transforming test scores into Percentile scores, sigma scores, Z- scores, Normalized standard scores (T- scores and Stanine scores), and their interpretations.
- Continuous and Comprehensive Evaluation (CCE), NCCF, Holistic Progress Cards (HPC), Use of AI in Evaluation and Online and on-demand examination.

Suggested Readings:

- Aggrawal, J. C. (1997). *Essentials of examination system, evaluation, tests and measurement*. Vikas Publishing House Pvt Ltd.

- Banks, S. R. (2005). *Classroom assessment: issues and practices*. Allyn & Bacon.
- Blooms, B. S. (1956). *Taxonomy of educational objectives*. Longman Green and Company.
- Brown, F. G. (1983). *Principle of Educational and Psychological Testing* (3rd ed.). Holt, Rinehart and Winter.
- Cohen, R. J., Swerdlik, M. E., & Phillips, S.M. (1996). *Psychological testing and assessment: An introduction to the tests and measurement*. Mayfield Publishing Co.
- Earl, L. M. (2006). *Assessment as learning: using classroom assessment to maximize student learning*. SAGE Publications Ltd.
- Ebel, R. L., & Frisbie, D. A. *Essentials of Educational Measurement* (5th ed.). Prentice Hall of India Private Limited.
- Goswami, M. (2011). *Measurement and evaluation in psychology and education*. Neelkamal Publishers.
- Gronlund, N. E. (2003). *Assessment of student Achievement*. Allyn & Bacon.
- Hopkins, K. D. (1998). *Educational and psychological measurement and evaluation*. Allyn and Bacon.
- Linn, R. L. & Miller, M. D. (2008). *Measurement and assessment in teaching* (9th ed.). Pearson Education.
- Linn, R. L. & Gronlund, N. E. (2000). *Measurement and assessment in teaching*. Merrill Prentice Hall.
- Macmillan, J. H. (1997). *Classroom assessment, principles and practice for effective instruction*. Allyn and Bacon.
- Mohan, R. (2016). *Measurement evaluation and assessment in education*. PHI Learning Pvt. Ltd.
- National Council of Educational Research and Training (2006). *Position paper: Examination Reforms*. NCERT.
- Nayak, B. K., & Rath, R. K. (2010). *Measurement, evaluation, statistics and guidance services in education*. Axis Publications.
- Noll, V. H., Scannell, D. P. & Craig, R. C. (1979). *Introduction to educational measurement*. Houghton Mifflin.

- Sidhu, K. S. (2014). *New Approaches to Measurement and Evaluation*. Sterling Publishers Pvt. Ltd.
- Singh, A. K. (2019). *Tests, measurements and research in behavioural sciences* (6th ed.). Bharti Bhawan.
- Thorndike, R. L., & Hagen, E. (1978). *Measurement and evaluation in psychology and education* (2nd ed.). John Wiley & Sons.

Course Name: **Statistics in Education**

Course Code: **MAEDUMC702**

Course Type: MAJOR COURSEWORK	Course Details: MC-2			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. understand the fundamental concepts, methods, and applications of statistics in educational research and assessment.
2. apply descriptive and inferential statistical techniques to analyze educational data.
3. critically evaluate and report statistical findings in educational studies following academic standards.
4. use statistical software and interpret outputs for educational decision-making and research.

Course Content: Theory

Unit-I: Foundations of Educational Statistics

- Meaning, Nature, Scope, and Importance of Statistics in Education.
- Types of Data, Variables, Scales of Measurement, and Data Organization.
- Frequency Distributions, Tabulation, and Graphical representation of data.
- Measures of Central Tendency: Mean, Median, Mode, and their educational applications.

Unit-II: Descriptive Statistics and Educational Measurement

- Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation.
- Skewness and Kurtosis in educational data.

- Concept, Characteristics, Measuring divergence from normality, Applications of the Normal Probability Curve.
- Standard scores, Percentiles, Percentile Ranks, T- Score and z-score.

Unit-III: Inferential Statistics in Education

- Sampling techniques and sampling distributions. Estimation, confidence intervals, and standard error.
- Hypothesis testing: Null hypothesis, significance levels, Type I and Type II errors.
- Parametric tests: t-test, Z-test, and Analysis of Variance (ANOVA).
- Non-parametric tests: Chi-square, Mann–Whitney U Test and Kruskal Wallis Test.

Unit-IV: Correlation, Prediction, and Statistical Applications

- Correlation: Concept and types.
- Methods of Correlation: Pearson's Product-Moment, Spearman's Rank Correlation, Biserial and Point-Biserial, Partial and Multiple correlations.
- Concepts and types of Regression, Methods for estimation of linear regression and prediction (one / two predictor) and uses in educational research, Multiple Regression (concept and uses).
- Use of statistical software (SPSS/R/Excel) and interpretation of outputs in educational research.

Suggested Readings:

- Aggarwal, Y. P. (2017). *Statistical methods: Concepts, application and computation*. Sterling Publishers.
- Best, J. W., & Kahn, J. V. (2016). *Research in education* (10th ed.). Pearson.
- Ferguson, G. A. (1959). *Statistical Analysis in Psychology and Education*. McGraw-Hill Book Company.

- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage.
- Garrett, H. E. (2018). *Statistics in psychology and education*. Paragon International Publishers.
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10th ed.). Cengage Learning.
- Grbich, C. (2006). *Qualitative Data Analysis: An Introduction*. SAGE Publication.
- Gupta, S. P. (1996). *Statistical Methods*. Sultan Chand & Sons.
- Hamburg, M. (1979). *Basic Statistics: A Modern Approach*, (2nd Ed.). New York: Harcourt Brace.
- Healey, J. F. (2002). *Statistics: Tool for Social Research*, (6th ed.), Australia: Wadsworth.
- Johnson, P. O. (1961). *Statistical Methods in Research*, Prentice Hall.
- Kendall, G. M. (1982). *Dictionary of Statistical Terms*. Longman.
- Kerlinger, F. N., & Lee, H. B. (2008). *Foundations of behavioral research* (4th ed.). Cengage Learning.
- Korin, B. P. (1977). *Introduction to Statistical Methods*. Intrhrop Pub.
- Kurtz, A. K. (1980). *Statistical Methods in Education and Psychology*. Narosa Publication.
- Mangal, S. K. (2019). *Statistics in psychology and education* (3rd ed.). PHI Learning.
- McCall, R. B. (1970). *Fundamental Statistics for Psychology*. Harcourt Brace Jovanovich, Inc.
- Privitera, G. J. (2020). *Statistics for the behavioral sciences* (3rd ed.). Sage.
- Saha, K. (2012). *Statistics in Education and Psychology*. Asian Books Pvt. Ltd
- Sahu, B. K. (1998). *Statistics in psychology and Education*. Kalyani Publishers.
- Siegel, S., & Castellan, N. J. (1988). *Nonparametric statistics for the behavioral sciences* (2nd ed.). McGraw-Hill.
- Wiersma, W., & Jurs, S. G. (2009). *Research methods in education: An introduction* (9th ed.). Pearson.

Course Name: **Fundamentals of Educational Research**

Course Code: **MAEDUMC703**

Course Type: MAJOR COURSEWORK	Course Details: MC-3			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. know about research and educational research.
2. be acquainted with various research designs of educational research.
3. familiar with research problem, variables and hypothesis
4. carry out review of related literature.
5. recognize various sampling techniques.
6. know the process of data collection in educational research.
7. acquire competencies for analysing the collected data in educational research.
8. prepare citation, reference and bibliography.
9. write the research proposal and report.
10. be on familiar terms with research and publication ethics and research misconduct.

Course Content: Theory

Unit-I: Educational Research

- Research: Concept and Characteristics.
- Educational Research: Concept and Characteristics. Types of Educational Research: Basic, Applied and Action.
- Research Designs: Qualitative- Grounded Theory, Narrative, Case Study, Ethnography. Quantitative- Experimental and Descriptive (Survey, Correlational, Ex-Post Facto studies,

Causal-Comparative) and Mixed: Characteristics, Types of MM designs (Triangulation, explanatory and exploratory designs), Steps in conducting a MM designs, Strengths and weakness of MM research. Historical Research.

- Research Problem, Variables and Hypothesis: Criteria of selecting a good Research Problem. Meaning and Types of Variables. Meaning, Characteristics and Types of Research Hypothesis.

Unit-II: Literature Review and Sampling Techniques

- Review of Related Studies: Need, Significance and Procedure.
- Concept of Population, Sample, Sampling and sampling error, Characteristics of a good sample.
- Sampling Techniques: Probability and Non Probability.
- Tools and Techniques of Data Collection in Research: Characteristics of good research tools. Types of Tools: Rating scale, Attitude scale, Questionnaire, Aptitude test and Achievement Test and Inventory. Techniques of Research: Observation, Interview and Projective Techniques.

Unit-III: Analysis of Data (Quantitative and Qualitative Method) & Research Report

- Analysis of Data: Quantitative and Qualitative.
- Citation, Reference and Bibliography.
- Writing of Research Proposal.
- Writing of Research Report. Evaluating a Research Report.

Unit – IV: Research and Publication Ethics

- Research Ethics: Meaning, Importance and Principles.
- Research Integrity: Meaning, Importance and Principles.
- Research Misconducts: Falsification, Fabrication, and Plagiarism (FFP). Redundant publications: Duplicate publications, Overlapping publications and Salami slicing.
- Publication Ethics: Its Meaning, Importance and Ethical issues in Publication. Ethical use of AI in Research.

Suggested Readings:

- Aggarwal, J. C. (2002). *Educational Research*. Aryan Book Depot.
- Anderson, G. (1990). *Fundamentals of Educational Research*. The Falmer Press.

- Anfara, Vincent & Mertz Norma T. (2006). *Theoretical Frameworks in Qualitative Research*. SAGE Publication.
- Borg, W. R., & Gall, M. D. (1983). *Educational Research – An Introduction*. Longman, Inc.
- Best J.W., & Kahn, J. V. (2006). *Research in Education* (9th ed.). Pearson Education Inc.
- Best Practice Guidelines on Publishing Ethics, 2014 John Wiley & Sons, Ltd.
- Bird, A. (2006). *Philosophy of Science*. Routledge.
- Borg, W. R., & Gall, M. D. (1983). *Educational Research – An Introduction*. Longman, Inc.
- Committee on Publication Ethics (COPE): Guidelines on good publication practice (<https://publicationethics.org/resources/guidelines>).
- Creswell, J. W. (2002). *Educational Research Planning, Conducting and Evaluating Quantitative and Qualitative Research*. Merrill Prentice Hall.
- Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. SAGE Publication.
- Denzin, N.K. and Lincoln, Y.S. (eds.) (1994). *Handbook of Qualitative Research*. Sage.
- Elhance, D.N. (1975). *Practical Problems in Statistics*. Kitab Mahal.
- Ellis, L. (1994). *Research Methods in Social Sciences*. Madison: Brown and Benchmark.
- Gay, L. R., Mills, G. E., & Airasian, P. (2000). *Educational Research: Competencies for Analysis and Applications* (10th ed.). Pearson.
- Good, C.V, Barr, A. S. & Scates, D. E. (1962). *Methodology of Educational Research*. Appleton Crofts.
- Hadin, C. (1987). *Research Design: Strategies and Choices in the Design of Social Research*. Allen and Unwin.
- Keevis, J. (1988). *Educational Research Methodology: An International Handbook*. Pergamon.
- Kendall, G. M. (1982). *Dictionary of Statistical Terms*. Longman.
- Kerlinger F. N. (1978). *Foundation of Behavior Research*. Rinehart Winston.
- Kish, L. (1967). *Survey Sampling*. John Wiley.
- Korin, B. P. (1977). *Introduction to Statistical Methods*, Cambridge: Intrhrop Pub.

- Kothari, C. R. (1990). *Research Methodology: Methods and Techniques* (2nd ed.). Vishwa Prakashan.
- Kothari, C. R. (2009). *Research methodology methods and techniques*. New age international (P) Ltd publishers.
- Koul, L. (2019). *Methodology of Educational Research* (5th ed.). Vikas Publishing House.
- Mertens, D. M. (1998). *Research Methods in Education and Psychology - Integrating Diversity with Quantitative & Qualitative Approaches*. Sage.
- Mertens, D. M. (1998). *Research Methods in Education and Psychology - Integrating Diversity with Quantitative & Qualitative Approaches*. Sage.
- Moser, C.A. (1958). *Survey Methods in Social Investigation*, Heimann Education Book Ltd.
- Moser, C.A. (1958). *Survey Methods in Social Investigation*, Heimann Education Book Ltd.
- Muralidhar, K., Ghosh, A., & Singhvi, A. K. (2019). *ETHICS in Science Education, Research and Governance* (Edit.). New Delhi: Indian National Science Academy.
- Muralidhar, K., Ghosh, A., & Singhvi, A.K. (2019). *Ethics in Science Education, Research and Governance* (Edit.). Indian National Science Academy.
- Pathak, R. P. (2008). *Methodology of educational research*. Atlantic Publishers & Distributors.
- Punch, K. F., & Oancea, A. (2014). *Introduction to research methods in education* (2nd ed.). SAGE Publications.
- Salkind, N. J. (2006). *Exploring Research* (Sixth Edition). Pearson Prentice Hall.
- Sidhu, K. S. (2018). *Methodology of Research in Education*. Sterling.
- Sukhia, S. P., Mehrotra, P. V., Mehrotra, R. N. (1974). *Elements of Educational Research* (3rd edition). Allied Publishers
- Van Dalen, D. B, & Meyer, W. J. (1979). *Understanding Educational Research*. Mcgraw Hill C.

Course Name: **Guidance and Counselling in Education**

Course Code: **MAEDUMC704**

Course Type: MAJOR COURSEWORK	Course Details: MC-4			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. explain the fundamental concepts, principles, objectives, scope, and significance of guidance and counselling in educational settings.
2. analyze the various types and areas of guidance and counselling, including educational, vocational, personal, and social guidance.
3. assess the guidance and counselling needs of diverse learners and recommend appropriate intervention strategies.
4. demonstrate knowledge of counselling processes, approaches, ethical standards, and professional competencies of counsellors.
5. apply counselling techniques and psychological assessment tools for effective learner support and development.
6. design and evaluate guidance and counselling services for promoting mental health, well-being, career development, and inclusive education.

Course Content: Theory

Unit-I: Foundations of Guidance and Counselling

- Meaning, nature, principles, objectives, and scope of guidance.
- Meaning, nature, principles, objectives, and scope of counselling.
- Relationship between guidance, counselling, education, and mental health.
- Need and significance of guidance and counselling in educational institutions.

Unit-II: Types and Areas of Guidance and Counselling

- Educational guidance: concept, objectives, and services in schools and higher education institutions.
- Vocational and career guidance: career development theories, career planning, and occupational information services.
- Personal and social guidance: adjustment problems, interpersonal relationships, and life skills development.
- Counselling for diverse learners: gifted, slow learners, children with special needs, and marginalized groups.

Unit-III: Counselling Process, Techniques, and Assessment

- Counselling process: stages, skills, ethics, and professional competencies of a counsellor.
- Approaches to counselling: Directive, Non-directive, Eclectic, Behavioural, Cognitive, and Humanistic approaches.
- Techniques of counselling: Interview, observation, case study, group counselling, and crisis counselling.
- Psychological assessment in guidance and counselling: aptitude, interest, personality, achievement, and adjustment tests.

Unit-IV: Guidance and Counselling Services in Educational Settings

- Organization and administration of guidance and counselling services.
- Guidance and counselling for mental health, well-being, stress management, and emotional resilience.
- ICT, online counselling, career information systems, and digital guidance services.
- Contemporary issues and challenges in guidance and counselling.

Suggested Readings:

- Agarwal, R. (2006). *Educational vocational guidance & counselling: Principle, techniques & programs*. Shipra Publications.
- Aggarwal, J. C. (2024). *Educational vocational guidance and counselling*. Doaba Publications.

- Basu, N. C. (2012). *Educational and vocational guidance*. International Publishing House.
- Bhatla, S. (2019). *Guidance and counselling*. Twenty First Century (Bookman).
- Biswas, R., & Sharma, A. (2021). *Guidance and counselling*. Aaheli Publishers.
- Chauhan, S. S. (2009). *Principles and techniques of guidance* (2nd ed.). Vikas Publishing House.
- David, S. (2020). *Handbook of therapies for school counselling*. Notion Press.
- Ghosh, S., & Nag, S. (2022). *Handbook of practical guidance and counselling*. Rita Publications.
- Gibson, R. L., & Mitchell, M. H. (2008). *Introduction to counselling and guidance* (7th ed.). Pearson.
- Goswami, M. (2016). *Essentials of guidance and counselling*. Lakshi Publisher.
- Jaiswal, S. (2021). *Principles of guidance and counselling*. Kanishka Publishers.
- Kochhar, S. K. (1984). *Guidance and counselling in colleges and universities*. Sterling Publishers.
- Kochhar, S. K. (1985). *Educational and vocational guidance in secondary schools*. Sterling Publishers.
- Madhukar, I. (2006). *Guidance and counselling*. Authorspress.
- Milner, P. (1974). *Counselling in education*. J.M. Dent & Sons.
- Nag, S., & Pandey, P. (2022). *Guidance and counselling*. Rita Publications.
- National Council of Educational Research and Training. (2020). *Guidance and counselling*.
- Rao, S. N., & Sahajpal, P. (2012). *Counselling and guidance* (3rd ed.). McGraw Hill Education.
- Reddy, G. L., Thankachan, T. C., & Michael, R. (2021). *Guidance and counselling*. Neelkamal Publications.
- Samanta, T. K., & Nandan, D. (2011). *Guidance and counselling* (3rd ed.). Dasgupta & Co. Ltd.
- Sehgal, K. P. (2019). *Guidance and counselling*. R Sons Books.
- Sharma, A. R. (2010). *Guidance and counselling*. Vinod Pustak Mandir.

- Sharma, R. N., & Sharma, R. (2004). *Guidance and counselling in India*. Atlantic Publishers & Distributors.
- Yadav, P. K., & Gupta, V. (2016). *Educational guidance and counselling*. R. Lall Book Depot.

Course Name: **Education for Sustainable Development**

Course Code: **MAEDUMN701**

Course Type: MINOR	Course Details: MNC-1			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. develop appreciation and understanding about the concepts and components of sustainable development.
2. understand the goals and challenges for sustainable development.
3. gain insights into the international efforts to safeguard the Earth's environment and resources.
4. familiar with the concept of education for sustainable development.
5. recognise key sustainability issues, and participate in actions to promote sustainable development.
6. know the role of different government and non-government groups for the promotion of sustainable development.

Course Content: Theory

Unit-I: Introduction to Sustainable Development

- Meaning of Sustainable Development.
- Principles of Sustainable Development.
- Characteristics and scope of Sustainable Development.
- Importance and Challenges of Sustainable Development.

Unit-II: Goals and Challenges of Sustainable Development

- Proposal for UN's Sustainable Development Goals at Rio.
- Sustainable Development Goals (SDGs) – targets, indicators, challenges and strategies for SDGs.
- Strength and weaknesses of Sustainable Development Goals.
- Global and Local Challenges of Sustainable Development.

Unit-III: Education for Sustainable Development

- Meaning of education for Sustainable Development.
- Importance of education for Sustainable Development.
- Challenges for the education for Sustainable Development.
- The decade of education for sustainable development within the context of globalization (Indian context).

Unit-IV: Governance and Policy for Sustainable Development

- National Laws and Policies for Sustainable Development: Brief outline of NAPCC, National Green Tribunal Act-2010 and Environment Protection Act-1986.
- Role of Government agencies for Sustainable Development.
- Role of NGOs and Civil Society for Sustainable Development.
- The 2030 Agenda for Sustainable Development.

Suggested Readings:

- Adenle, A. A., Azadi, H., & Arbiol, J. (2015). Global assessment of technological innovation for climate change adaptation and mitigation in developing world. *Journal of Environmental Management*, 161, 261–275.
- Chiras, D. D., & Reganold, J. P. (2010). *Natural resource conservation: Management for a sustainable future* (10th ed.). Pearson.
- Fisher, M. H. (2018). *An environmental history of India: From earliest times to the twenty-first century*. Cambridge University Press.
- Headrick, D. R. (2020). *Humans versus Nature: A global environmental history*. Oxford University Press.

- McDonough, W., & Braungart, M. (2002). *Cradle to cradle: Remaking the way we make things*. North Point Press.
- Ministry of Environment, Forest and Climate Change. (2019). *A handbook on international environment conventions & programmes*. Government of India.
- Sachs, J. D. (2015). *The age of sustainable development*. Columbia University Press.
- Singh, J. S., Singh, S. P., & Gupta, S. R. (2006). *Ecology, environment and resource conservation*. Anamaya Publishers.
- Theis, T., & Tomkin, J. (Eds.). (2012). *Sustainability: A comprehensive foundation*. OpenStax CNX.
- Tiefenbacher, J. P. (Ed.). (2022). *Environmental management: Pollution, habitat, ecology, and sustainability*. IntechOpen.
- World Commission on Environment and Development. (1987). *Our common future*. Oxford University Press.

Semester-II

Course Name: **Contemporary Issues in Education**

Course Code: **MAEDUMC801**

Course Type: MAJOR COURSEWORK	Course Details: MC-5			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. understand the constitutional provisions, and institutional frameworks in India.
2. analyze and evaluate key issues in education, including universalization, higher education challenges, and social inequalities.
3. examine the role of education in addressing social problems such as unemployment, disadvantage, and commercialization.
4. develop a global perspective by understanding globalization and peace education.
5. develop an understanding on Education for Sustainable Development.

Course Content: Theory

Unit-I: Universalization of Elementary and Secondary Education

- Educational Provisions in the Constitution of India.
- Universalization of Elementary Education: Status, Challenges and Prospects.
- Universalization of Secondary Education: Status, Challenges and Prospects.
- Role of DPEP, SSA-SSM, RMSA and RUSA.

Unit-II: Higher Education

- Types of institutions: Central, State, Deemed, and Private Universities.
- Regulatory bodies: UGC, AICTE, NCTE and NAAC.
- Problems of Higher Education in India.
- National Institutional Ranking Framework (NIRF): Major functions.

Unit-III: Social Issues in Education

- Unemployment: Concept, Causes and Role of education in India.
- Population Control: Concept, Challenges and Prospects.
- Education of Socially Disadvantaged Section: SCs, STs and Minorities, problems of Education of disadvantage section.
- Privatization and Commercialization of education.

Unit-IV: Global Peace and Education

- Concept of Globalization, its major features and effects on education.
- Millennium Development Goals (MDGs) and the Education For All (EFA) Goals.
- Peace Education and Conflict Resolution: Concepts of peace, personal peace, forms of conflict and the relationship between peace and education. The relevance of peace in national and international development.
- Education for Sustainable Development: Concept, Aims and Objectives and Role of education in Sustainable Development.

Suggested Readings:

- Agarwal, J. C. (2017). *Recent developments and trends in education: With special reference to India*. Shipra Publications.
- Banerjee, J. P. (2018). *Education in India: Past, present and future*. Central Book Agency.
- Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
- Mukherjee, S. N. (1961). *History of Indian education (Modern)*. Acharya Book Depot.
- Mukherjee, S. N. (1989). *Education in India: Today and tomorrow*. Acharya Book Depot.

- Mukhopadhyay, M., & Parhar, M. (Eds.). (2007). *Education in India: Dynamics and development*. Shipra Publications.
- Mohanty, J. (2018). *Current trends in Indian education*. Deep & Deep Publications.
- Nurullah, S., & Naik, J. P. (2019). *A history of education in India (1901–1985)*. Macmillan Publishers India.
- Pathak, R. P. (2017). *Education in the emerging Indian society*. Atlantic Publishers.
- Sharma, R. A. (2018). *Sociological foundations of education*. R. Lall Book Depot.
- Tilak, J. B. G. (2018). *Education and development in India: Critical issues in public policy and development*. Palgrave Macmillan.
- UNESCO. (2015). *Rethinking education: Towards a global common good?* UNESCO Publishing.
- UNESCO. (2017). *Education for sustainable development goals: Learning objectives*. UNESCO Publishing.
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. United Nations.

Course Name: **Comparative Education**

Course Code: **MAEDUMC802**

Course Type: MAJOR COURSEWORK	Course Details: MC-6			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. explain the concept, scope and methods of Comparative Education.
2. analyze factors influencing educational systems globally.
3. compare educational systems of selected countries.
4. examine contemporary global educational trends and reforms.

Course Content: Theory

Unit-I: Conceptual Framework of Comparative Education

- Meaning, Nature and Scope of Comparative Education.
- Aims and Objectives of Comparative Education.
- Importance of the study of Educational Systems in a comparative perspective.
- Historical Development of Comparative Education. Distinction between Comparative Education and International Education.

Unit-II: Methods and Factors of Comparative Education

- Methods of Comparative Study: Descriptive method, Historical method, Sociological method, Analytical method and Juxtaposition.
- Racial, Religious and Linguistic.
- Historical, Sociological, Geographical and Cultural.
- Scientific, Economical and Political.

Unit-III: Education System (Primary Education, Secondary Education, Higher Education and Teacher Education) in various Countries:

- Education System of India: Aims and Objectives of Education, Structure and Curriculum of Education and Administration of Education (Recent reforms National Education Policy 2020).
- Education System of Australia: Aims and Objectives of Education, Structure and Curriculum of Education and Administration of Education.
- Education System of Japan and China: Aims and Objectives of Education, Structure and Curriculum of Education and Administration of Education.
- Education System of United Kingdom and USA: Aims and Objectives of Education, Structure and Curriculum of Education and Administration of Education.

Unit-IV: Contemporary Issues and Trends in Comparative Education

- Globalization and Education: Concept of globalization, Impact on curriculum and policy, Internationalization of higher education.
- Role of International Organizations: UNESCO and global education, UNICEF and Child Education, OECD, PISA and SAARC.
- Emerging Trends: Inclusive education, Digital learning,
- Current Issues: Privatization of education, Quality and equity, Brain drains.

Suggested Readings:

- Bray, M., Adamson, B., & Mason, M. (2007). *Comparative education research: Approaches and methods*. Springer.
- Chattaraj, S. P. (n.d.). *Shikkha dese o bidese* [শিক্ষা দেশে ও বিদেশে]
- Chaube, S. P., & Chaube, A. (1993). *Comparative education*. Vikas Publishing House Pvt.Ltd.
- Collin, H. (Ed.). (1974). *World perspective*. Allied Publishers.
- Department of Education (1937). *General survey of education in Japan*. Tokyo.
- Hans, N. (1987). *Comparative education: A study of educational factors and traditions (4th ed.)*. Harper & Row.

- Kandel, I. L. (1972). *Comparative education: A comprehensive survey*. McGraw-Hill.
- Kenneth, R.K. (1956). *Education in USA*. London: Alwen Ltd.
- Khan, Mohammada Abbas (2004). *Modern Comparative Education*. Anmol Publications Pvt. Ltd.
- Mukhopadhyay, D. (2017). *Tulonamulak shikkha [তুলনামূলক শিক্ষা]*. Paschim Banga Rajya Pustak Parshad.
- Mukhopadhyay, M., Kaibarta, M., Gantait, B., & Mukherjee, M. (2024). *The World of Learning: Lessons from 52 Countries*. Vol. I. ETMA.
- Philip, E.Johns (1971). *Comparative Education: Purposes and Methods*. Australia: University of Greenland Press.
- Rao, V.K., & Reddy, R. (2004). *Comparative Education*. New Delhi: Common Wealth Publishers.
- Russel, J.D., & Judd, C.H. *The American Educational System*.
- Saha, L. J., & Dutta, S. (2011). *Comparative education: The concepts, determinants and methods*. Atlantic Publishers.
- Sharma, A.P. (1972). *Contemporary Problems of Education*. New Delhi.
- Sharma, P. (2009). *Encyclopedia of Comparative Education*. Ashish Publishing House.
- Sharma, R.N. (2005). *Comparative Education*. Surjeet Publications.
- Sharma, R.S. (2005). *Comparative Perspectives on Education*. ABD Publishers.
- Sharma, Y.K. (2005). *Comparative Education: A Comparative Study of Educational Systems*. Kanishka Publishers & Distributors.
- Smith , W.O.L. *Education in Great Britain*. Oxford University Press.
- Sodhi, T.S. (2004). *Textbook of Comparative Education*. Vikas Publishing Home Private Limited.
- Suzuki, A. (Ed.). (2015). *Handbook of comparative education*. Springer.
- Tikly, L. (2015). *Education and international development: An introduction*. Bloomsbury.
- Ulich, Robert (2006). *The Education of Nations: A Comparison in Historical Perspectives*. Surjeet Publications.

- Wain, K. (2018). *Comparative education: Continuity and change in the global era*. Routledge.
- WN, I. (2010). *Comparative education: Trends and issues*. Pearson.

Course Name: **Open and Distance Learning**

Course Code: **MAEDUMC803**

Course Type: MAJOR COURSEWORK	Course Details: MC-7			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. explain the meaning, characteristics, objectives, importance of open and distance learning.
2. understand the merits and demerits of open & distance learning.
3. understand the planning and management of open and distance learning
4. develop proficiency in designing and preparing self-learning materials suitable for distance learning contexts.
5. utilize technologies effectively to enhance teaching and learning experiences in distance learning.
6. describe the relationship among Non-formal, Correspondence, Distance and Open Education
7. discuss the present status of open and distance learning in India.
8. explain the role of multi-media in open and distance learning.
9. elaborate the concept of SWAYAM, MOOC, DIKSHA and NPTEL.
10. discuss the problems of open and distance learning in India.
11. understand the quality enhancement in open and distance learning
12. explain the role of DEC, IGNOU and NIOS in open and distance learning

Course Content: Theory

Unit-I: Concept of Open and Distance Learning

- Meaning, concept and nature of Open and Distance Learning.
- Growth and Development of Open and Distance Learning in India.
- Characteristics, objectives and importance of Open and Distance Learning.
- Merits and demerits of Open and Distance Learning.

Unit-II: Planning and Management of Open and Distance Learning

- Planning of Open and Traditional University System.
- Designing and preparing Self-Learning Materials (SLM).
- Use of Technology in Distance and Open learning system.
- Relationship among Non-formal, Correspondence, Distance and Open Education.

Unit-III: Status of Open and Distance Learning in India

- Present Status of Open and Distance Learning in India.
- Role of multi-media in Open and Distance Learning.
- Various platforms of Open and Distance learning – SWAYAM, MOOC, DIKSHA and NPTEL.
- Problems of Open and Distance Learning in India.

Unit-IV: Quality Enhancement of Open and Distance Learning

- Quality Assurance of Open and Distance Learning.
- Mechanisms for maintenance of standards in Open and Distance Learning.
- Role of Distance Education Council (DEC)
- Role of Indira Gandhi National Open University (IGNOU) and National Institute of Open Schooling (NIOS)

Suggested Readings:

- Chib, S. S. (1986). *Distance Education*. Chadda Publication.
- Criscito, P. (2004). *Barron's guide to distance learning*. Barron's Educational Series.
- Daniel, J. S., Stroud, M. A., & Thompson, J. R. (Eds.). (1982). *Learning at a distance: A world perspective*. Athabasca University Press.

- Garrison, D. R. (1989). *Understanding distance education: A framework for the future*. Routledge.
- Holmberg, B. (1985). *Status and structure of distance education* (2nd ed.). Lector Publishing.
- Holmberg, B. (1986). *Growth and structure of distance education*. Croom Helm.
- Holmberg, B. (1989). *Theory and practice of distance education*. Routledge.
- Indira Gandhi National Open University. (1988). *Growth and philosophy of distance education* (Blocks 1–3).
- Joshi, P. K. (2007). *Modern distance education*. Anmol Publications.
- Kaye, A., & Rumble, G. (Eds.). (1981). *Distance teaching for higher and adult education*. Croom Helm.
- Keegan, D. (1989). *Foundations of distance education*. Routledge.
- Race, P. (1994). *The open learning handbook* (2nd ed.). Kogan Page.
- Rathore, H. C. S. (1993). *Management of distance education in India*. Ashish Publishing House.

Course Name: **Environmental Education**

Course Code: **MAEDUMC804**

Course Type: MAJOR COURSEWORK	Course Details: MC-8			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. understand the fundamental concepts, principles, and historical development of Environmental Education, environmental awareness, conservation, and sustainable development.
2. analyze environmental pollution, global environmental issues, and the role of environmental movements, governance, and policies in addressing environmental challenges.
3. examine Environmental Education as an academic discipline, including curriculum development, teaching-learning approaches, teacher preparation, and the integration of ICT and innovative practices.
4. demonstrate positive environmental attitudes, ethical values, and practical skills by participating in environmental conservation activities, promoting environmental awareness, and contributing to sustainable development at individual and community levels.

Course Content: Theory

Unit-I: Foundations of Environmental Education

- Concept of Environmental Education: Meaning, definition aims, objectives, characteristics, need and utility of Environment of Environmental Education, Role of School in Environmental Education.
- Environmental Awareness: Meaning and concept of Environmental Awareness, Distinction between Environmental Education and Environmental Awareness, Role of teacher's in development of Environmental Awareness in School: Eco-clubs, Tree plantation and Cleanliness drive, Green campus initiatives.
- Environmental Conservation: Meaning, characteristics, and utility of Environment of Environmental Conservation, Role of School in Environmental Conservation and Sustainable Development.
- Environmental Education in India: Historical Development of Environmental Education in India, Present Status of Environmental Education in India, Future Prospects of Environmental Education in India.

Unit-II: Environmental Education as an Academic Discipline

- Concept of Academic Discipline: Meaning, Characteristics of a Discipline, Environmental Education as an Academic Discipline and Objectives and Components of this study.
- Curriculum and Programme Development: Stage-wise Course Contents of Environmental Education in school and higher education, Newman's Four- Fold Environmental Programme.
- Teaching-Learning Approaches: Methods and Techniques of Teaching Environmental Education, Educational Excursions and Field Trips, Co-Curricular Activities in Environmental Education.
- Teacher Preparation: Environmental Education for Teacher Education, NCERT's emphasis on Environmental Education.

Unit-III: Environmental Pollution

- Air Pollution: Meaning, Nature and Sources of Air Pollution, Health effects of exposure to Air Pollutants, Air Pollution and sustainability, Environmental Education for Control and Prevention of Air Pollution.
- Water Pollution: Meaning, Nature and Sources of Water Pollution, impacts on Human health and aquatic ecosystem, importance of clean water for life, Environmental Education and public awareness to control Water Pollution.
- Soil Pollution: Meaning, Nature and Sources of Soil Pollution, Environmental Education and public awareness to control Soil Pollution.
- Noise Pollution: Meaning, Nature and Sources of Soil Pollution, Environmental Education and public awareness to control noise Pollution.

Unit-IV: Global Issues

- Global Environmental Issues: Climate change, Global warming, Ozone layer depletion, Deforestation and Loss of Biodiversity.
- Environmental Movements: Chipko Movement, Narmada Bachao Andolan and Silent Valley Movement.
- Environmental Governance: Environmental Laws and Policies in Environment Protection, Role of Govt., NGOs and International Organizations in Environment Protection.
- Environmental Ethics: Concept and Principles of Environmental Ethics, Human-Environmental Relationship and Ethical Responsibility, Role of Teacher in environmental ethics and Value development and Community participation.

Suggested Readings:

- Batra, S. K., Batra, K., & Kaur, H. (2017). *Environmental studies*. Oxford University Press.

- Bharucha, E. (2013). *Textbook of environmental studies for undergraduate courses*. University Grants Commission/University of Bombay Press.
- Dash, M. C., & Dash, S. P. (2009). *Fundamentals of ecology* (3rd ed.). McGraw Hill Education.
- Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
- Ignacimuthu, S. (2017). *Environmental studies*. Narosa Publishing House.
- Kaur, H. (2018). *Environmental education*. Twenty First Century Publications.
- Miller, G. T., & Spoolman, S. E. (2020). *Environmental science* (16th ed.). Cengage Learning.
- National Council of Educational Research and Training. (2005). *National curriculum framework 2005*. NCERT.
- National Council of Educational Research and Training. (2006). *Position paper: National focus group on habitat and learning*. NCERT.
- Palmer, J. A. (1998). *Environmental education in the 21st century: Theory, practice, progress and promise*. Routledge.
- Pande, B. D., Dhawan, B. D., & Bawa, A. S. (Eds.). (2008). *Environmental education sourcebook for B.Ed. programme*. IUCN.
- Raven, P. H., Berg, L. R., & Hassenzahl, D. M. (2015). *Environment* (8th ed.). John Wiley & Sons.
- Sabde, P. C., & Harichandan, S. (2019). *Environmental education (Sem-IV)*. Sheth Publishers.
- Sharma, R. A. (2019). *Environmental education*. R. Lall Book Depot.
- Srivastava, R. K., Gupta, B., & Mishra, R. (2018). *Environmental studies education*. Doaba Publications.
- Thomas, G., Dymont, J. E., & Prince, H. (Eds.). (2021). *Outdoor environmental education in higher education: International perspectives*. Springer.
- UNESCO. (1978). *The Tbilisi declaration: Final report of the Intergovernmental Conference on Environmental Education*. UNESCO.
- UNESCO. (2020). *Education for sustainable development: A roadmap*. UNESCO.
- Yadav, M. S. (2018). *Environmental education*. APH Publishing Corporation.

Course Name: **Human Rights Education**

Course Code: **MAEDUMN801**

Course Type: MINOR	Course Details: MNC-2			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. understand human values.
2. explain the basic concept, nature and scope of Human Rights.
3. describe the Human Right Education at different levels of education.
4. comprehend Human Rights education and its significance.
5. understand the initiatives taken in the international level about Human Rights Education.
6. know the status of the vulnerable and disadvantaged sections of the society with regard to human rights.
7. familiar with the enforcement mechanisms of human rights in the society.
8. understand the diverse issues of Human Rights Education etc.
9. know the role of different advocacy groups for the promotion of human rights.

Course Content: Theory

Unit-I: Concept of Value, Human Rights and Human Rights Education

- Human Values: Dignity, Liberty, Equality, Justice, Unity in diversity, Ethics and Morality.
- Concepts, objectives, nature and scope of Human Rights.
- Meaning and Significance of Human Rights Education.
- Curriculum and Teaching Principle and Practices for Human Rights Education (at Elementary, Secondary and Higher Education level).

Unit-II: Human Rights and the Vulnerable and Disadvantaged Groups

- Human Rights and Women Rights (International and National Scenario).
- Human Rights and Child Rights (International and National Scenario).
- Status of SC, ST and OBC in relation to Human Rights in Indian Scenario.
- Human Rights Education: Problems and Challenges.

Unit-III: Human Rights and Enforcement Mechanisms

- Human Rights Acts- 1993.
- Human Rights Commission- National and in the State of West Bengal (Powers and Functions Only).
- Indian Judiciary system- role of Supreme Court and High Court in India.
- Commission of Women, Children, Minority and SC/ST- (National and West Bengal).

Unit-IV: Role of various Organizations in promoting Human Rights

- Role of Global Agencies: UN [Universal Declaration of Human Rights (The Preamble and the Article 1 to 30)], UNESCO, Vienna Declaration.
- Role of Government and Non-Government Organisations (NGO).
- Role of Educational Institutions.
- Role of Mass Media for promotion of Human Rights.

Suggested Readings:

- Aggarwal, J. C. (2008). *Education in the emerging Indian society*. Shipra Publications.
- Basu, D. D. (2015). *Introduction to the Constitution of India*. LexisNexis.
- Bhatia, K. L. (Ed.). (1990). *Judicial activism and social change*. Deep & Deep Publications.
- Chand, J. (2007). *Education for human rights*. Anshah Publishing House.
- Gupta, S., & Mittal, M. (1995). *Status of women and children in India*. Anmol Publications.
- Jed, P. K. (2002). *Educating human rights*. Bhargava Book House.
- Mohanty, J. (2006). *Human rights education*. Deep & Deep Publications.

- Ministry of Law and Justice. (2024). *The Constitution of India*. Government of India.
- Mishra, P. K. (2012). *Human rights (Acts, statutes and constitutional provisions)*. Ritu Publications.
- Naseema, C. (2002). *Human rights education: Conceptual and pedagogical aspects*. Kanishka Publishers & Distributors.
- Naseema, C. (2008). *Human rights education: Theory and practice*. Shipra Publications.
- National Human Rights Commission. (n.d.). *National Human Rights Commission*. <https://nhrc.nic.in/>
- Ponaiyan, M., & Ramalingam, P. (1999). *Education and human rights*. P. R. Books.
- Rao, D. B. (2004). *Human rights education*. Discovery Publishing House.
- Reddy, G. L., Thankachan, T. C., George, A., & Shylaja, M. (2015). *Human rights education*. Neelkamal Publications.
- Sastry, T. S. N. (2011). *Introduction to human rights and duties*. University of Pune Press.
- Saxena, K. P. (1996). *Teaching human rights: A manual for adult education*. Landy Books.
- Sharma, V. (2002). *Human rights violation: A global phenomenon*. APH Publishing Corporation.
- Subramanian, S. (2000). *Human rights training*. Manas Publications.
- The Protection of Human Rights Act, 1993, Pub. L. No. 10 of 1994 (India). nhrc.nic.in.
- United Nations. (2015). *Universal declaration of human rights*.
- West Bengal Human Rights Commission. (n.d.). *West Bengal Human Rights Commission*. <http://wbhrc.nic.in/#>

Semester-III

Group (A)

Course Name: **Dynamics of Teacher Education**

Course Code: **MAEDUMCE901**

Course Type: Major Research Coursework Elective	Course Details: MCE-1			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. know the concept, nature, scope, objectives, and importance of teacher education.
2. trace the historical development of teacher education in India.
3. be familiar with the agencies of teacher education.
4. analyze teacher education programmes, professional development and student teaching practices.
5. define and explain models of teaching and its application.
6. understand about the problems, quality concerns and knowledge base in teacher education.
7. critically evaluate contemporary issues, research trends, and emerging challenges in teacher education.

Course Content: Theory

Unit-I: Foundations of Teacher Education

- Concept, nature, scope, objectives, and importance of teacher education.
- Historical development of teacher education in India: Pre-independence and Post-independence. Similarities and differences.

- Agencies and regulatory bodies of teacher education: NCTE, UGC, NCERT, SCERT and DIET.
- Role of teacher at National and International Scenario. The Structure of Teacher Education Curriculum and its Vision in Curriculum Documents of NCERT, NCTE, NEP 2020 at Elementary, Secondary and Higher Secondary Levels.

Unit-II: Teacher Education Programmes, Models of Teaching, Professional Development and Student Teaching

- Teacher Education Programmes: Pre-service (Meaning, Nature, Objectives, Need, Scope and Models). Organization of Components of Pre-service Teacher Education: Transactional Approaches (for foundation courses) Expository, Collaborative and Experiential learning. In-service Teacher Education Programme (Meaning, Nature, Objectives, Need, Scope and Models).
- Models of Teaching: Meaning, nature, component and functions of Models of Teaching. Families of Models of Teaching– Glaser (Basic Teaching Model), Bruner (Concept Attainment Model), Ausubel (Advance Organizer Model) and Piaget (Cognitive Development Model).
- Professional Development: Teaching as a Profession, Professional ethics, and performance appraisal. Faculty Induction Programme (FIP - Guru Dakshita), NEP Orientation & Sensitization Programmes, Refresher Programmes, Short Term Programmes and Continuing Professional Development.
- Student teaching and school internship: Objectives, organization, supervision, evaluation, and integration of theory with practice.

Unit-III: Problems, Quality Concerns and Understanding Knowledge Base in Teacher Education

- Current problems of Teacher Education in India and Abroad. Suggestions for improving the condition of Teacher Education.

- Concept and Characteristics of Quality and Quality Education. Quality Assurance in Teacher Education. Quality Concerns in Teacher Education and Suggestions for Quality improvement. Quality Assessment: NAAC and NIRF.
- Understanding Knowledge base of Teacher Education from the view point of Schulman, Deng and Luke, and Habermas. Models of Teacher Education - Behaviouristic, Competency-based and Inquiry Oriented Teacher Education Models.
- Innovative practices in teacher education: Team teaching, Reflecting Teaching (Meaning of Reflective Teaching and Strategies for Promoting Reflective Teaching), blended learning, collaborative learning, internship, mentoring, and school-based experiences.

Unit-IV: Contemporary Issues, Research, and Emerging Trends in Teacher Education

- Implementation of teacher education curriculum.
- Teaching effectiveness, Teacher effectiveness, School effectiveness,
- Teacher behaviour modification, Cognitive style, and learning style.
- Emerging Trends in Teacher Education: Artificial Intelligence (AI) and Digital Literacy, Shift to Learner-Centric and Experiential Learning, Indian Knowledge System, STEAM, and TPACK.

Suggested Readings:

- Aggarwal, J. C. (2010). *Teacher and education in a developing society* (5th ed.). Vikas Publishing House.
- Aggarwal, P. (2010). *Teacher education*. Saurabh Publishing House.
- Ali, L. (2011). *Teacher education*. APH Publishing Corporation.
- B.R.Purkait. (1996). *Principles and Practices of Education* (p. 509). New Central Book Agency.
- Cohen, L., Manion, L., & Morrison, K. (2004). *A guide to teaching practice* (5th ed.). Routledge.
- Day, C., & Sachs, J. (Eds.). (2004). *International handbook on the continuing professional development of teachers*. Open University Press.

- Gordon, T. (2003). *Teacher effectiveness training: the program proven to help teachers bring out the best in students of all ages* (p. 343). Three Rivers Press.
- Goyel, S. (2015). *Teacher Effectiveness* (p. 198). APH Publishing Corporation.
- Joyce, B., Weil, M., & Calhoun, E. (2003). *Models of teaching* (7th ed.). Allyn & Bacon.
- Kumar, T. P. (2010). *Teacher Education*. APH Publishing Corporation.
- Mishra, L. (2013). *Teacher education: Issues and innovation*. Atlantic Publishers & Distributors.
- Mohan, R. (2025). *Teacher education* (3rd Edition, p. 328). PHI Learning Pvt. Ltd.
- Panda, B. N. (2009). *Teacher Education*. APH Publishing Corporation.
- Panigrahi, S. C., & Biswal, A. (2012). *Teacher Education* (p. 500). APH Publishing.
- Pany, S., & Mohanty, S. P. (2013). *Teacher education in India*. Shipra Publications.
- Passi, B. K., & Shah, M. M. (1974). *Microteaching in Teacher Education* (p. 71). Maharaja Sayajirao University of Baroda Press.
- Rao, D. B. (1998). *Teacher education in India*. Discovery Publishing House.
- Sarkar, S., & Mete, J. (2023). *Teacher education* (p. 296). Lambert Academic Publishing.
- Sharma, S. P. (2003). *Teacher Education: Principles, Theories and Practices* (p. 574). Kanishka Publishers Distributors.
- Sharma, S. R. (2008). *A handbook of teacher education*. Sarup & Sons.
- Tomar, S. M. (2004). *Teacher education: Making education effective*. Isha Books.

Course Name: **Advanced Educational Technology**

Course Code: **MAEDUMCE902**

Course Type: Major Research Coursework Elective	Course Details: MCE-2			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. understand the basics concepts of educational technology.
2. know the components of Educational Technology.
3. reflect upon various models of teaching along with their educational implications.
4. state and explain various components and factors of communication.
5. know the principles and maxims of teaching and its application.
6. explain the different modalities of teaching and designing instructional system.
7. develop an understanding about teaching behaviour.
8. understand the application of computers in education.
9. use e- learning tools in teaching learning and research.
10. share information and ideas through blogs and chatting groups.
11. analyse the social, ethical, and legal issues related to technology.

Course Content: Theory

Unit-I: Introduction to Educational Technology:

- Meaning, Nature and Use of Educational Technology.
- Approaches of Educational Technology: Hardware, Software and System Approach.

- Classification of Educational Technology: Devices on the basis of information resources, Mass Instructional Technology and Individualized Instructional Technology.
- Educational Technology and Allied Terms: Teaching Technology, Behavioural Technology and Instructional Technology. Advantages and disadvantages of Educational Technology.

Unit-II: Communication, Modalities of Teaching and Programmed Instruction:

- Communication: Concept, Nature and Types of Communication. Components of Communication Process. Factors affecting classroom communication. Effective classroom communication.
- Modalities of Teaching: Difference between teaching and instruction, conditioning and training. Levels of Teaching- Memory, Understanding and Reflective.
- Stages / phases of Teaching- Pre-active, Interactive and Post-active.
- Programme Instruction: Origin, Principles, Types, Development of programmed instruction material, importance and limitations.

Unit-III: Principles and Maxims of Teaching, Teaching Behaviour and Development of Instructional Design

- Principles and Maxims of Teaching: General and Psychological Principles of Teaching, Maxims of Teaching.
- Teaching Behaviour: Simulation, Micro-Teaching and Flander's Interaction Analysis Category System (FIACS).
- Models of Development of Instructional Design: ADDIE, ASSURE, Dick and Carey Model Mason's. Gagne's Nine Events of Instruction and Five E's of Constructivism, Nine Elements of Constructivist Instructional Design.
- Ethical issues in Artificial Intelligence. Leveraging Artificial Intelligence towards teaching and learning.

Unit-IV: Emerging Trends in Educational Technology (e-learning, Social Learning, OER and ICT):

- Concept of e-learning, Approaches to e-learning (Offline, Online, Synchronous, Asynchronous, Blended learning, Mobile Learning). Digital Initiatives of Government of India: SWAYAM PRAVA TV, E-Pathshala, GayanVani, Sekha App, and LRNR App.
- Social Learning: concept, use of web 2.0 and tools for learning, social networking sites (WhatsApp, LinkedIn, Facebook etc.), blogs, chats, video conferencing, and discussion forum).
- Open Educational Resources: (Creative Commons, Massive Open Online Courses; Concept and application), Ethical Issues in E-learning and Research: Cyber Security in e-learning, Online Professional Ethics and Digital Citizenship.
- Use of ICT in Evaluation, Administration and Research: E portfolios, ICT for Research - Online Repositories and Online Libraries, Online and Offline assessment tools (Online survey tools or test generators) – Concept and Development.

Suggested Readings:

- Aggarwal, J. C. (2018). *Essentials of Educational Technology* (3rd ed.). Vikas.
- Allen, D.W. et al. (1969). *Micro-teaching- A description*. Stanford University Press.
- Bhat, B. D., & Sharma, S. R. (1992). *Educational Technology Concept and Technique*. Kanishka Pub. House.
- Chand Tara (1990). *Educational Technology*. Anmol Pub.
- Das, R.C. (1993). *Educational technology – a basic text*. Sterling Publishers Pvt. Ltd.
- Dikshit, H. P., Garg, S., Panda, S., & Vijayshri (Eds.) (2002). *Access & equity: challenges for open and distance learning*. Kogan Page.
- Garg, S., Panda, S., Murthy, C. R. K., & Mishra, S. (Eds) (2006). *Open and distance education in global environment*. Viva Books.
- Garg, S., Puranik, C., Venkaiah, V., & Panda, S. (Eds) (2006). *Four decades of distance education in India: reflections on policy and practice*. Viva Books.

- Garrison, D.R., & Anderson, T. (2003). *e-learning in the 21st century: a framework for research and practice*. Routledge.
- Jangira, N.K., & Singh, A. (1992). *Core teaching skills – A microteaching approach*. NCERT.
- Joyce, B., & Calhoun, E. (2024). *Models of teaching* (10thed.). Routledge.
- Kulkarni, S.S. (1996). *Introduction to educational technology*. Oxford and IBH.
- Kumar, K.L. (2008). *Educational technology*. New Age International Pvt. Ltd
- Mangal, S. K., & Mangal, U. (2009). *Essentials of Educational Technology* (4th ed.). Prentice Hall India.
- Mishra, S. (2005). *Distance teacher education, process-issues and concern*. Mahamaya Publisher.
- Mishra, S. (2008). Developing e-learning materials: some pedagogical Concerns. *Indian Journal of Open Learning*, 17 (2).
- Mohanty, J. (1992). *Educational Technology*. Deep & Deep Pub.
- Mukhopadhyay, M. (2001). *Educational technology: challenging issues*. Sterling Publishers.
- Mukhopadhyay, M. (2001). Instructional science in Indian schools. in Rajput J.S. and others (Eds), *Experiences in school education*. NCERT, NewDelhi.
- Mukhopadhyay, M. (Eds) (1991). *Educational technology: Third Year book*, Vol.I & II. All India Association for Educational Technology.
- NCERT (2006). *National curriculum framework 2005 position paper national focus group on educational technology*. New Delhi.
- Passi, B.K. (1976). *Becoming better teacher: Micro-teaching approach*. Centre for Advanced Study in Education, M. S. University of Baroda.
- Reddy, M., & Ravishankar, S. (1994). *Curriculum Development and Educational Technology*. Sterling Pub. Private Ltd.
- Resta, P. (Ed.) (2002). *Information and communication technologies in teacher education: A planning guide*. UNESCO.
- Roblyer, M.D. (2008). *Integrating educational technology into teaching*. Pearson.

- Sampath et. al. (1981). *Introduction to educational technology*. Sterling Publishers Pvt. Ltd.
- Senapaty, H.K. (2009). *ICT integrated learning materials on basic school subjects from constructivist perspectives*. Regional Institute of Education, NCERT.
- Senapaty, H.K. (2011). *Pedagogy-technology integration for the professional development of teacher educators*. Regional Institute of Education, NCERT.
- Senapaty, H.K., & Pradhan, N. (2005). Designing instruction for constructivist learning. *Staff and Educational Developmental International*, 9 (2&3), 93-102.
- Singh, L. C. (2010). *Educational technology for teachers and educators*. Vasunandi Publication.
- Singh, L. C. (Ed.) (2010). *Educational technology for teachers and educators*. Vasunandi Publication.
- Singh, L. C. et al. (1987). *Micro-teaching- theory and practice*. Psychological Corporation.
- UNESCO (2002). *Information and communication technology in education: A curriculum for schools and programme of teacher development*. UNESCO.
- UNESCO (2002). *Open and distance learning: Trends, policy and strategy considerations*. UNESCO.
- UNESCO (2005). *How ICT can create new, open learning environments: Information and communication technologies in schools: A handbook for teachers*. UNESCO.
- UNESCO (2008). *Capacity building for ICT integration in education*. Retrieved from <http://portal.unesco>.
- UNESCO (2008). *ICT Competency standards for teachers: Policy Framework*. Retrieved from <http://portal.unesco>.
- Venkataiah, N. (1996). *Educational technology*. APH Publishing Corporation.
- Walia, J.S. *Essentials of Educational Technology*. Ahim Paul Pub.

Course Name: **Mindfulness and Resilience**

Course Code: **MAEDUMCE903**

Course Type: Major Research Coursework Elective	Course Details: MCE-3			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have ability to:

1. understand the concepts of mindfulness, wellbeing, and resilience.
2. develop self-awareness and emotional regulation skills.
3. learn evidence-based mindfulness practices.
4. build resilience for coping with academic, personal, and professional challenges.
5. apply mindfulness techniques for stress management and positive mental health.

Course Content: Theory

Unit-I: Understanding of Mindfulness

- Meaning, nature, scope and significance of mindfulness.
- Historical and philosophical foundations of mindfulness.
- Mindfulness in Eastern and Western perspectives.
- Benefits of mindfulness for wellbeing and mental health.

Unit-II: Mindfulness, Well-being, and Healthy Living

- Mindfulness meditation: concepts and techniques
- Breathing exercises, body scan, and mindful movement
- Mindfulness in education, workplace, and daily life
- Stress management through mindfulness

Unit-III: Understanding of Resilience

- Meaning, nature, and dimensions of resilience
- Theories of resilience
- Psychological resilience and wellbeing.
- Resilience across lifespan and diverse contexts.

Unit-IV: Building Resilience for Healthy Living

- Resilience-building techniques and conflict management
- Positive thinking, optimism, and hope
- Self-compassion and gratitude practices
- Physical wellness: sleep, nutrition, and exercise

Suggested Readings:

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. Freeman.
- Bourne, E. J. (2020). *The anxiety and phobia workbook* (7th ed.). New Harbinger Publications.
- Dweck, C. S. (2016). *Mindset: The new psychology of success* (Updated ed.). Ballantine Books.
- Forsyth, J. P. (2016). *The mindfulness and acceptance workbook for anxiety: A guide to breaking free from anxiety, phobias, and worry using acceptance and commitment therapy* (2nd ed.). New Harbinger Publications.
- Ginsburg, K. R.(2020). *Building resilience in children and teens: Giving kids roots and wings* (4th ed.). American Academy of Pediatrics.
- Jennings, P. A., & Siegel, D. J. (2015). *Mindfulness for teachers: Simple skills for peace and productivity in the classroom*. W. W. Norton & Company.
- Kabat-Zinn, J. (2005). *Wherever you go, there you are: Mindfulness meditation in everyday life*. Hyperion.
- Lyubomirsky, S. (2007). *The how of happiness: A scientific approach to getting the life you want*. Penguin Press.

- Maddi, S. R., & Khoshaba, D. M. (2005). *Resilience at work: How to succeed no matter what life throws at you*. AMACOM.
- Neff, K. (2015). *Self-compassion: The proven power of being kind to yourself*. William Morrow.
- Neff, K., & Germer, C. (2018). *The mindful self-compassion workbook: A proven way to accept yourself, build inner strength, and thrive*. Guilford Press.
- Newport, C. (2019). *Digital minimalism: Choosing a focused life in a noisy world*. Portfolio.
- Reivich, K., & Shatte, A. (2003). *The resilience factor: 7 keys to finding your inner strength and overcoming life's hurdles*. Harmony.
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.
- Snyder, C. R., Lopez, S. J., Edwards, L. M., & Marques, S. C. (Eds.). (2021). *The Oxford handbook of positive psychology* (3rd ed.). Oxford University Press.
- Srinivasan, M. (2014). *Teach, breathe, learn: Mindfulness in and out of the classroom*. Parallax Press.
- Williams, M., Teasdale, J., Segal, Z., & Kabat-Zinn, J. (2024). *The mindful way through depression: Freeing yourself from chronic unhappiness* (2nd ed.). Guilford Press.

Group-(B)

Course Name: **Higher Education in India**

Course Code: **MAEDUMCE904**

Course Type: Major Research Coursework Elective	Course Details: MCE-4			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. trace the concept, objectives and importance of Higher Education in India.
2. elaborate the constitutional provisions and the development of higher education during pre and post-independence periods.
3. critically analyze the multi-layered regulatory architecture and governance mechanisms.
4. evaluate the strategic vision and fundamental principles of the National Education Policy (NEP) 2020.
5. examine persistent socio-economic issues relating to access, equity, and inclusion.
6. assess the impact of digital transformation and emerging virtual learning trends.
7. analyze current strategies for the internationalization of higher education.

Course Content: Theory

Unit-I: Overview of Higher Education in India

- Concept and Objectives of Higher Education in India.
- Importance of Higher Education in the Present Context.
- Development of Higher Education in India during the Pre-Independence and Post-Independence.

- Constitutional Provision Regarding Higher Education. Massification and Diversification of Higher education Institutions, Types of Higher Education Institutions in the country, Role of Higher education in national development.

Unit-II: Policy Perspectives and Regulatory Architecture

- Overview of the National Policy on Education (1968, 1986, 1992 PoA).
- Critical review of National Education Policy (NEP) 2020 with reference to Higher education.
- Statutory Bodies: UGC, AICTE, NCTE and AIU
- Higher education for Viksit Bharat 2047 and Legislative reforms (*Viksit Bharat Shiksha Adhithan Bill-2025*).

Unit-III: Quality, Finance, and Socio-economic Issues

- Quality Assurance and Accreditation: Understanding National Institutional Ranking Framework (NIRF), QS World University Rankings, Functions of NAAC and NBA, and the challenge of sustaining excellence in a massive system.
- Financing Higher Education: Analysis of public expenditure, the role of HEFA and PM-USHA in strategic funding, and the rising significance of private sector investment.
- Access, Equity, and Inclusion: Strategies for increasing GER in Higher education, addressing regional disparities, and supporting SEDGs.
- Employability and the Skill Gap: Bridging the mismatch between graduate capabilities and industry needs through vocationalization, "Lok Vidya," and industry-academia collaborations.

Unit-IV: Emerging Trends and Global Perspectives

- Digital Transformation and Virtual Learning: The rise of MOOCs (SWAYAM), the National Digital Library, OERs, and AI and its challenges
- Internationalization of Higher Education: Promoting India as a global study destination, facilitating student and faculty mobility, and establishing International Branch Campuses (IBCs).

- Research and Innovation: Strengthening the culture of knowledge creation through the National Research Foundation (NRF) and competitive peer-reviewed funding.
- Lifelong Learning and Flexibility: Implementation of the Academic Bank of Credits (ABC), multiple entry/exit options, and credit transfer norms to foster a resilient student-centric ecosystem.

Suggested Readings:

- Agarwal, J.C. (2010). *Landmarks in the History of Modern Indian Education*. S. Chand Publication.
- Agarwal, P. (2006). *Higher Education in India: The Need for Change* (Working Paper No. 180). Indian Council for Research on International Economic Relations (ICRIER).
- Arya, P. P. (2006). *Higher Education and Global Challenges*. DVS Publishers.
- Association of Indian Universities. (2021). *National Education Policy-2020: Transforming Higher Education in India* (P. Mittal & S. R. D. Pani, Eds.).
- Deka. B. (2014). *Higher Education in India, Development and problems*. Atlantic Publication.
- Deshpandey, H. V. (2020). *Higher Education in India: New Perceptions and Perspectives*. Notion Press.
- Ernst & Young Parthenon & FICCI. (2022). *Higher Education in India: Vision 2047*.
- Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
- Government of India. (2025). *Viksit Bharat Shiksha Adhishtan Bill, 2025*.
- Indira Gandhi National Open University (IGNOU). (n.d.). *Higher Education in India: An Introduction* (Unit 9). School of Education.
- Mohanty, J. (2002). *Current trends in Higher education*. Deep and Deep Publisher.
- NITI Aayog. (2025). *Internationalisation of Higher Education in India: Prospects, Potential, and Policy Recommendations*.
- Rawat. P.L (2019). *History of Indian Education*. Ramprashad Publication.
- Sharma, S. C., Mittal, P., Varghese, M. A., Swamy, S. S., & Pani, S. R. D. (2023). *Indian Higher Education Heritage*. Association of Indian Universities.

Course Name: Understanding Indian Knowledge System

Course Code: MAEDUMCE905

Course Type: Major Research Coursework Elective	Course Details: MCE-5			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. explain the nature, scope, and significance of the Indian Knowledge System.
2. analyze the philosophical and historical foundations of Indian educational thought.
3. evaluate indigenous educational institutions, curriculum, and pedagogical practices.
4. apply IKS perspectives in educational research, curriculum development, and contemporary educational practice.

Course Content: Theory

Unit-I: Foundations and Historical Development of Indian Knowledge System

- Meaning, definitions, characteristics, objectives, scope, and relevance of Indian Knowledge System; relationship between knowledge, wisdom, and values.
- Historical evolution of IKS: Vedic, Post-Vedic, Classical, Medieval, Colonial, and Modern periods.
- Sources of Indian knowledge: Vedas, Upanishads, Epics, Smritis, Puranas, Buddhist and Jain literature, and other indigenous traditions.
- Indian Knowledge System and National Education Policy (NEP) 2020: Vision, principles, and educational implications.

Unit-II: Philosophical Foundations and Indigenous Educational Traditions

- Indian concept of knowledge (Jnana) and Pramana (sources of knowledge); epistemological foundations of Indian thought.
- Major schools of Indian philosophy and their educational implications: Nyaya, Sankhya, Yoga, Vedanta, Buddhist, and Jain philosophies.
- Indigenous educational systems and practices: Gurukula, Tapovan, Parishads, Pathshalas, Tols, and Madrasas.
- Great centres of learning in ancient India: Takshashila, Nalanda, Vikramashila, Vallabhi, Odantapuri, and Jagaddala; role and status of teacher and learner.

Unit-III: Curriculum, Pedagogy, and Assessment in Indian Knowledge System

- Curriculum and educational aims in ancient India; holistic education and character formation through IKS.
- Teaching-learning methods in IKS: dialogue, debate, storytelling, meditation, experiential learning, reflective learning, and project-based learning.
- Community-based learning practices: field visits, local history, indigenous culture, and community engagement.
- Evaluation and assessment in traditional education; use of ICT and digital resources for teaching and learning IKS.

Unit-IV: IKS in Contemporary Education, Research, and Educational Development

- Integration of IKS in school education, teacher education, and higher education curricula.
- Relevance of Indian Knowledge System in modern education with special reference to inclusion, gender justice, social harmony, and sustainability
- Indigenous research traditions, epistemologies, and qualitative research approaches in educational studies.
- Challenges, opportunities, and future prospects of integrating IKS in educational policy, curriculum reform, and contemporary educational practice.

Suggested Readings:

- Desiraju, G. R., Panda, A., & Bhattacharya, D. (2022). *Indian knowledge systems: A primer*. Ministry of Education, Government of India.
- Jha, A. (2024). *Traditional knowledge system in India*. Atlantic Publishers.
- Kapoor, K., & Singh, A. K. (2005). *Indian Knowledge Systems* (1st Edition). D.K. Printworld Pvt. Ltd.
- Mahadevan, B., Bhat, V. R., & Pavana, N. R. (2022). *Introduction to Indian knowledge system: Concepts and applications*. PHI Learning Pvt. Ltd.
- Mahadevan, B., Bhat, V. R., & Pavana, R. N. N. (2022). *Introduction to Indian knowledge system: Concepts and applications* (Eastern Economy Edition). PHI Learning.
- Pandey, D. A. (2025). *Indian knowledge systems*. Notion Press.
- Rao, P., Rane, N., Dwivedi, V. V., & Dwivedi, K. (2025). *Indian knowledge system in higher education context*. Taneesha Publishers.
- Sahu, J., & Mittal, P. K. (2025). *Indian knowledge system: Foundations, heritage and contemporary relevance*. Taneesha Publishing.

Course Name: **Entrepreneurship and Economics of Education**

Course Code: **MAEDUMCE906**

Course Type: Major Research Coursework Elective	Course Details: MCE-6			L-T-P: 5-0-0	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
			30		70

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. know the concept, characteristics, functions and types of entrepreneur.
2. be familiar with the concept, features, importance and types of Entrepreneurship.
3. understand the history theories of entrepreneurship.
4. understand entrepreneurship in education.
5. know the tools, models and theories for entrepreneurial education.
6. recognize the concept, nature and scope of economics.
7. identify the basic concept of Economic Growth and Development.
8. comprehend the Partial Theories of Economic Growth and Development.
9. be acquainted with the concept, nature, functions, scope and importance of Economics of Education.
10. be on familiar terms with Educational Finance, Educational finance at Micro and Macro Levels and Budgeting.

Course Content: Theory

Unit-I: Introduction to Entrepreneur and Entrepreneurship

- Concept, Characteristics, Functions and Types of Entrepreneur.
- Concept, Features, Importance and Types of Entrepreneurship.
- History of entrepreneurship in India. Theories of Entrepreneurship.

- Relationship between entrepreneur and entrepreneurship. Differences between Entrepreneurship and Intrapreneur. Problems in Growth of Entrepreneurship and its solutions. Entrepreneurial Traits. Leadership – An essential trait of the entrepreneur, Traits of Leadership, Manager Versus Leader.

Unit-II: Entrepreneurship in Education

- Meaning, Nature, Scope, Needs and Significance of Entrepreneurship in Education.
- Entrepreneurship education in India; Institutions conducting entrepreneurial development programs in India. Challenges and future perspectives of entrepreneurship education.
- Relation between Entrepreneurship and Education. The role of education in the entrepreneurial process and development.
- Tools, models and theories helpful for entrepreneurial education. Course Contents of Entrepreneurial Development Programme.

Unit-III: Introduction to Economics

- Concept, Nature and Scope of Economics.
- Basic Concept of Economic Growth and Development.
- Difference between Economic Growth and Development.
- Partial Theories of Economic Growth and Development: Vicious Circle of Poverty and Big Push Theory

Unit-IV: Economics of Education

- Concept, Nature, Functions, Scope and Importance of Economics of Education. Relationship between Economics and Education.
- History of Economics of Education (World and Indian Perspectives).
- Cost Benefit Analysis Vs Cost Effective Analysis in Education, Economic returns to Higher Education: Signaling Theory Vs Human Capital Theory.
- Concept of Educational Finance, Educational finance at Micro and Macro Levels, Concept of Budgeting.

Suggested Readings:

- Akinyemi, S. (2010). *The Economics of Education*. Strategic Book Publishing and Right Co.
- Ansari, M. M. (1987). *Education and Economic Development*. AIU Publication.
- Bairagya, S. Foundational Course: Economics of Education. <https://nptel.ac.in/courses/130105860>
- Bornstein, D. & Davis, S. (2010). *Social Entrepreneurship: What Everyone Needs to Know*. Oxford University Press.
- Catherall, R., & Richardson, M. (2017). *Social entrepreneurship in Education*. British Council.
- Chattopadhyay, S. (2012). *Education and Economics Disciplinary evolution and policy discourse*. Oxford University Press.
- Checchi, D. (2006). *The Economics of Education: Human Capital, Family Background and Inequality*. Cambridge University Press.
- Garg, V. P. (1985). *The Cost Analysis in Higher Education*. Metropolitan Book Co.
- Harbison & Myers. (1968). *Education, Manpower and Economic Growth*. Oxford & IBH. (Indian Edition).
- Hisrich, R. D., Peters, Michael, P., & Shepherd, D. A. (2018). *Entrepreneurship*. McGraw Hill Education.
- Johnes. G., & Johnes. J. (2004). *International handbook on Economics of Education*(Ed.). Edward Elgar Publishing Ltd.
- Nagpal C. S. & Mittal A. C. (1993). *Economics of Education* (Ed.). Anmol Publications
- Neck, H. M., Greene, P. G., Brush, C. G. (2014). *Teaching Entrepreneurship: A Practice-Based Approach*. Edward Elgar Publishing Ltd.
- Pandit, H. N. (1969). *Measurement of Cost Productivity & Efficiency of Education*. NCERT.
- Psachaeopoulos, G. (1987). *Economics of Education Research and Studies*. Elsevier Science Ltd.
- Rajaiah, B. (1987). *Economics of Education*. Mittal Publications.
- Schultz, T. W. (1963). *The Economic Value of Education*. Columbia University Press.

- Sethi, V. (1997). *Educational Development and Resource Mobilization*. Kanishka Publication.
- Shankar, R. K. (2012). *Entrepreneurship Theory & Practice*. McGraw Hill Education.
- Sharma, R. A. (2007). *Economics of Education*. R. Lall Book Depot.
- Singh. B. *Economics of Indian Education* (Ed.). Meenakshi Prakashan,
- Sodhi, T.S. (1978). *Education and Economics Development*. Mukand Publication.
- Vaizey John (1962). *Economics of Education*. Faber & Faber.
- Varghese & Tilak. (1962). *The financing of Indian Education, India; project paper of International Institute of educational planning*.

Course Name: **Research Methodology with AI**

Course Code: **MAEDURMAI901**

Course Type:	Course Details: RMC-1			L-T-P: 3-0-4	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		30	15	20	35

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. know the concept and evolution of Artificial Intelligence.
2. understand the role and applications of AI in educational research and academic writing.
3. identify research problems and formulate research questions using AI-assisted tools.
4. conduct systematic literature reviews and identify research gaps using AI platforms.
5. develop and validate research instruments using AI-assisted tools.
6. apply AI for quantitative and qualitative data analysis and interpretation.
7. create effective data visualizations and research reports using AI tools.
8. use AI for academic writing, summarization, paraphrasing, and citation management.
9. demonstrate ethical, responsible, and transparent use of AI while maintaining academic integrity.
10. evaluate emerging AI technologies and promote effective human–AI collaboration in research.

Course Content: Theory & Practical

Unit-I: Introduction to Research with Artificial Intelligence

- Concept and Evolution of Artificial Intelligence.
- AI in Research: Concept, Characteristics, Benefits, Challenges and Limitation of using AI in Research.

- Role of AI in the Research Process.
- Future of AI in Research Methodology.

Unit-II: AI in Research Problem Identification and Literature Review

- Role of AI in identifying research problems, Advantages and limitations of AI-generated research ideas.
- AI-powered literature search using academic databases and search engines (Semantic Scholar, ResearchRabbit, Connected Papers, Scite.ai, PubMed AI, Elicit by Ought Tools, etc.).
- AI applications in educational research and identification of research problems: ChatGPT, Gemini, Claude, Perplexity AI (Features, Usage in Research Processes and Practical).
- AI-supported literature review, evidence synthesis, and research gap identification (Semantic Scholar, Elicit, Consensus, Scite, Litmaps, thesify etc.).

Unit-III: AI for Academic Writing, Research Design, Data Analysis and Interpretation

- AI-assisted academic writing, summarization, paraphrasing, and language enhancement (ChatGPT and other AI Chatbots, Hemingway Editor, Paperpal, QuillBot, SciSpace, Copilot, Jenni AI, Scholarcy, Writefull, Slick Write, Grammarly, wordtune, Thesis AI, etc.).
- AI tools for generating Citation and Reference / Bibliography: SCISPACE, Quillbot, ResearchPal, Sourcely, Scite AI, PaperPal, Citation Machine, Scribbr, Trink AI, MyBib, Mendeley, Zotero, EndNote, RefWorks, Paperpile, EasyBib, BibTeX and Cite This For Me etc.
- AI-assisted quantitative data analysis: Julius AI, Claude, Polymer (uses and practical application) etc. Qualitative data coding, thematic analysis: NVivo, ATLAS.ti, MAXQDA (uses and practical application).
- Data visualization using AI tools: Tableau AI, Microsoft Power BI Copilot, ThoughtSpot, Flourish, Zoho Analytics (Uses and Practical application), All in one Research Assistant tools: SciSpace, Roadrunner AI, Gamma etc.

Unit-IV: Humanization, Ethics, Academic Integrity, and Future of AI in Research

- Humanization of AI content: Humanize Effective workflow to minimize AI text and add a natural touch, Humanization tools (Humanize AI, Humanizer Pro, StealthWriter, Undetectable AI, Bypass AI, QuillBot AI Humanizer, Smodin AI Detection Remover, Grammarly AI Humanizer etc.).
- Ethical considerations of AI in Research: Concept of Ethical AI and its principles: fairness, accountability, Autonomy, transparency, privacy, and data protection. AI Ethical Frameworks.
- Academic integrity, responsible AI use, and institutional/UGC guidelines.
- Emerging AI tools and future trends in educational research and knowledge creation. Human–AI collaboration, limitations of AI, and best practices for responsible research.

Suggested Readings:

- Barsha, S., & Munshi, S. A. (2023). Implementing artificial intelligence in library services: a review of current prospects and challenges of developing countries. *Library Hi Tech News*, 41(1), 7-10.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- Creswell, J. W., & Guetterman, T. C. (2021). *Educational Research: Planning, conducting, and evaluating quantitative and qualitative research* (6th ed.). Pearson.
- Kothari, C. R., & Garg, G. (2019). *Research methodology: Methods and techniques* (4th ed.). New Age International Publishers.
- Kumar, R. (2023). *Research methodology: A step-by-step guide for beginners* (6th ed.). SAGE Publications.
- Mollick, E. (2024). *Co-intelligence: Living and working with AI*. Portfolio.
- Priya, K., & Balasubramanian, T. (n.d.). AI Tools for Academic Researchers. Marudhar Kesari Jain College for Women (Autonomous).
- Russell, S., & Norvig, P. (2021). *Artificial intelligence: A modern approach* (4th ed.). Pearson.

- Shakuntla, & Goel, N. (n.d.). *AI Tools for Research*. Infinite Research.
- Shukla, V. (2023). *Research in the Age of AI: The Ultimate Guide to Using AI Tools*.
- Srivastava, A. P., & Agarwal, S. (2024). *Utilizing AI Tools in Academic Research Writing*. IGI Global.
- Xu, Y., Liu, X., Cao, X., Huang, C., Liu, E., Qian, S..... & Zhang, J. (2021). Artificial intelligence: A powerful paradigm for scientific research. *The Innovation*, 2(4).

Semester-IV

Course Name: **Literature Review**

Course Code: **MAEDURD1001**

Course Type: Dissertation	Course Details: RDC-1			L-T-P: 0-3-4	
Credit: 5	Full Marks: 100	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		60		40	

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. identify and evaluate relevant scholarly literature related to the research topic.
2. summarize and synthesize key findings from existing studies.
3. analyze different theories, concepts, and research methodologies used in the literature.
4. identify research gaps and justify the need for the proposed study.
5. critically compare and contrast findings from multiple sources.
6. organize and present a coherent literature review using appropriate academic writing and citation styles.
7. develop a strong theoretical or conceptual framework to support the research.

Course Content: Practical

Conducting Literature Review.

Course Name: **PG Dissertation**

Course Code: **MAEDURD1002**

Course Type: Dissertation	Course Details: RDC-2			L-T-P: 0-10-10	
Credit: 15	Full Marks: 300	CA Marks		ESE Marks	
		Practical	Theoretical	Practical	Theoretical
		180		120	

Course Learning Outcomes:

After the completion of course, the students will have the ability to:

1. the students are expected to establish link between theoretical framework and research work.
2. develop skills of formulating research problem and research questions.
3. formulate objectives, hypothesis and research questions.
4. design the research plan.
5. develop various tools and techniques for data collection.
6. search and find the primary and secondary sources of data.
7. search techniques and strategies for the analysis and interpretation of data in qualitative, quantitative and mixed research.
8. search about writing research report, references and bibliography.

Course Content: Practical

Prepare a Research Report.