M.Sc. PROGRAM CURRICULUM - 2026

M.Sc. TWO YEAR DEGREE

(Applicable for the batches admitted from A.Y 2026-27)

Real Estate Valuation

(in academic collaboration with IoV)

Version 1.0–Approved in the BoS meeting on 10-01-2026 & Academic Council meeting on 28-02-2026

Aditya Nagar, ADB Road, Surampalem - 533 437

About Institution of Valuers (IOV):

The Institution of Valuers (IOV), established in 1968, is the oldest and pioneering professional body for valuation in India. With over 35,000 members across 10 asset classes and a pan-India presence through 46 branches, IOV has consistently worked to strengthen valuation standards, professional ethics, and capacity building. The Institution is certified under ISO 9001:2015 and ISO 26000:2010 standards and partners with the NSDC through the BFSI Sector Skill Council to offer specialised certification programmes in Valuation and allied subjects. IOV also publishes the ISSN-approved monthly journal Indian Valuer, contributing significantly to academic and professional discourse.

VISION & MISSION OF THE UNIVERSITY

VISION:

To be a globally recognized university through excellence in Education, Innovation and Sustainable growth.

MISSION:

Deliver collaborative education to prepare students for global challenges through

- Transformative learning
- Vibrant research ecosystem
- Sustainable and inclusive community

DEPARTMENT OF CIVIL ENGINEERING

VISION:

To emerge as a premier center of excellence in Civil Engineering by promoting holistic education, innovative thinking, and lifelong learning for a sustainable future.

MISSION:

M1: Deliver quality education through an industry-aligned curriculum and experiential learning

M2: Foster interdisciplinary research and technological advancement to address global challenges.

M3: Promote sustainable practices that contribute to societal development

PROGRAM OUTCOMES (POs)

After successful completion of the program, the graduates will be able to

PO1:	**Advanced Knowledge and Understanding** Demonstrate in-depth and advanced knowledge in the chosen discipline, including critical awareness of current developments, research trends, and theoretical foundations.
PO2:	**Critical Thinking, Analytical Ability and Problem-Solving in Complex Contexts** Apply critical thinking and analytical skills to evaluate complex problems, synthesize information from multiple sources, implement innovative solutions to complex real-world and develop evidence-based conclusions.
PO3:	**Communication and Leadership Skills** Communicate effectively with academic, professional, and public audiences; demonstrate leadership, teamwork, and decision-making abilities in multidisciplinary settings.
PO4:	**Application of Modern Tools and Technology** Select and use appropriate advanced tools, technologies, software, and analytical techniques relevant to the discipline.
PO5:	**Research Competence** Design and conduct independent research using appropriate methodologies, data analysis techniques, and scholarly practices, culminating in research reports, dissertations, or publications.
PO6:	**Support Lifelong Learning and Adaptability** Engage in self-directed learning, adapt to emerging trends and technologies, and pursue continuous professional development.

PROGRAM SPECIFIC OUTCOMES (PSO's)

After successful completion of the program, the graduates will be able to

PSO 1	Conduct Land and Building Valuation Assignments under the Land & Building category in accordance with the regulatory framework.
PSO 2	Conduct Independent Property Inspections and perform Feasibility Analysis for Real Estate Development Projects using Residual Valuation Techniques.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)
Graduates of the Program will

PEO 1	**Meet Professional and Accreditation Standards** Fulfil the educational criteria required for registration under the Land & Building category with the Insolvency and Bankruptcy Board of India (subject to examination and experience requirements) and demonstrate adherence to professional ethics and standards.
PEO 2	**Utilize Modern Valuation Tools and Analytics** Use advanced tools such as valuation software, financial modelling (Excel- based), GIS applications, and data analytics techniques to conduct research, forecasting, and risk assessment.
PEO 3	**Exhibit Professional, Entrepreneurial, Advisory Skills and Regulatory and Legal Compliance** Perform essential duties of a Valuer in real-world scenarios, work effectively as Real Estate Appraisers, Consultants, Asset Managers, or Valuation Analysts with consultancy firms, banks, and NBFCs, or establish independent valuation practice with sound ethical and business management principles.

ADITYA UNIVERSITY

Department of Civil Engineering

Master of Science in Real Estate Valuation

Program Curriculum - 2026

Credit Division:

S.No.	Category of Course	Credits
1	Foundation & Management Courses (FMC)	4
2	Core Valuation & Legal Courses (CVLC)	36
3	Technical & Analytical Courses (TAC)	16
4	Research Ethics & Professional Practice (REPP)	4
5	Industry-Oriented Project Work/Field Work (IOPW / FW)	10
6	Internship (INT)	10
	Total Credits	80

Suggestive Semester Wise Curriculum
I Semester

Course code	Course Title	Course	Credits				Total Hours	Pre-Requisite Courses
		Category	L	T	P	C		
2618CE01	Fundamentals of Business, Economics and Accounting	FMC	3	-	1	4	5	-
2618CE02	Valuation-1	CVLC	3	-	1	4	5	-
2618CE03	Land, Land Surveying & Land Record & Revenue System in India	TAC	3	-	1	4	5	-
2618CE04	Laws -I	CVLC	4	-		4	4	-
2618CE05	Civil Constructions Practices and Material Science	TAC	3	-	1	4	4	-
	Total		**16**	-	**4**	**20**	**23**	-

II Semester

Course code	Course Title	Course	Credits				Total Hours	Pre-Requisite Courses
		Category	L	T	P	C		
2618CE06	Urban Land Economics & Town Planning	TAC	4	-	-	4	4	-
2618CE07	Quantity Survey & Estimation	CVLC	3	-	1	4	5	LLSLRRSI
2618CE08	Environmental Issues in Valuation	CVLC	3	-	1	4	5	-
2618CE09	Laws – II	CVLC	4	-		4	4	LI
2618CE10	Valuation -II	CVLC	3	-	1	4	5	VI
	Total		**17**	-	**4**	**20**	**23**	-

III Semester

Course code	Course Title	Course Category	Credits L	T	P	C	Total Hours	Pre-Requisite Courses
2618CE11	Valuation- III	CVLC	3		1	4	5	VII
2618CE12	Computer Skills & Digital Technologies	TAC	2		2	4	6	-
2618CE13	Laws III	CVLC	3		1	4	5	LII
2618CE14	Allied Assets Valuation	CVLC	3		1	4	5	-
2618CE15	Research, Data Analytics & Professional Ethics	REPP	3		1	4	5	-
	Total		**14**		**6**	**20**	**26**	-

IV Semester

Course code	Course Title	Course Category	Credits L	T	P	C	Total Hours	Pre-Requisite Courses
2618CE16	Industry-Oriented Project Work/Field Work	IOPW/FW	-	-	-	10	10	-
2618CE17	Internship – (Minimum 3 Months)	INT	-	-	-	10	10	-
	Total		-	-	-	**20**	**20**	-

FUNDAMENTALS OF BUSINESS, ECONOMICS AND ACCOUNTING

Course Code: 2618CE01

L	T	P	C
4	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1:	Understand Basic Accounting Concepts and Ethical Practices in Accounting and Financial Reporting.
CO 2:	Understand Fundamental Concepts of Financial Management and demonstrate Decision-Making Skills.
CO 3:	Comprehend Fundamental Economic Concepts and their Application to Real-World Business and Policy Decisions & interpret Macroeconomic Indicators such as GDP, Inflation, Unemployment, and Fiscal Policy.
CO 4:	Evaluate the impact of Government Interventions on Markets and Economic Efficiency.
CO 5:	Understand the concept of Depreciation (Accounting & Technical) and its importance in Valuation & Methods of calculating Depreciation for Valuation.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	-	-	-	1
CO2	3	3	-	-	1	1
CO3	3	3	-	-	1	2
CO4	-	3	1	-	2	2
CO5	3	-	-	1	-	1

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	1	-
CO2	1	1
CO3	3	3
CO4	3	3
CO5	3	-

UNIT – I:

Basics and Objects of Book Keeping and Accountancy :

Introduction to Book Keeping and Accounting, Objects of Book Keeping & Accountancy, Difference between Book Keeping and Accounting, Basic Accounting Concepts and Principles, Accounting Standards and Framework, Accounting Terminology, Double Entry System,
Systematic Recording of Transactions, Trading Account, Profit and Loss Account, Income and Expenditure Account, Presentation of Balance Sheet, Going Concern Concept.

UNIT – II

Analysis of Financial Statements

Importance of Financial Statements in Valuation, Ascertainment of Financial Position, Reliability of Financial Statements, Role of Financial Statements in Decision-Making, Role of Financial
Statements in Asset Valuation and Goodwill Valuation, Impact of Accounting Policies on Valuation Outcomes.

UNIT – III

Fundamental Financial Management & Analysis

Budgeting, Capital Structure Management, Investment Appraisal, Formulating and Implementing Long-Term, High-Level Goals, Factors Influencing Business Strategy, Key Components of Strategic Management, Evaluation & Control.

UNIT – IV

Principles of Economics, Micro & Macro Economics

Principles of Economics, Microeconomics: Consumption, Price Mechanism, Types of Market Structures and Pricing in Different Market Structures, Factors of Production, Theory of Rent, Capital Interest, Organization & Profit, Macroeconomics: Introduction, Functions of Money, Inflation & Deflation, Savings & Investment, Components of Economy, Concepts of GDP and GNP.

UNIT – V

Depreciation- Fundamentals, Types (Accounting & Technical Concept) & Methods of calculating Depreciation for Valuation.

Fundamentals of Depreciation, Types of Depreciation, Factors Affecting Depreciation, Depreciation in Financial Reporting vs. Valuation Context, Legal Provisions (Companies Act / Income Tax Basics – Overview), Accounting Concept of Depreciation, Technical / Valuation Concept of Depreciation, Methods of Calculating Depreciation.

Text Books

1. Financial Accounting, T.S. Grewal, S. Chand Publications, Latest Edition. *(ISBN: 978-9352533404)*
2. Principles of Economics, N. Gregory Mankiw, Cengage Learning, 8th Edition, 2017. *(ISBN: 978-1305585126)*

Reference Books

1. Business Analysis and Valuation Using Financial Statements, Krishna G. Palepu, Paul M. Healy, Cengage Learning, 5th Edition, 2012. *(ISBN: 978-0324302868)*
2. Financial Management: Theory and Practice, Eugene F. Brigham, Michael C. Ehrhardt, Cengage Learning, 15th Edition, 2016. ***(ISBN: 978-1305632295)***

Web Links

1. **https://nptel.ac.in/courses/110**
2. **https://www.investopedia.com**

VALUATION -1

Course Code: 2618CE02

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Understand the Meaning and Purpose of Valuation

CO 2: Comprehend how to determine the Economic Worth of Assets, Businesses, Securities, or Investments using Systematic and Logical Methods.

CO 3: Understand the relationship between Production Expenses, Market Pricing, and the Perceived Worth of Goods and Services enabling effective Economic, Managerial and Financial Decisions.

CO 4: Gain knowledge of Legal and Regulatory Aspects and importance of its Compliance.

CO 5: Equip themselves with the knowledge of globally recognized Valuation Standards and Ethical Principles, ensuring professional, consistent, transparent and legally compliant Valuation Practices.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	-	-	-	-	1
CO2	3	3	-	-	2	2
CO3	3	-	-	-	1	2
CO4	3	-		-	2	2
CO5	3	-	-		2	1

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	1
CO2	3	1
CO3	2	1
CO4	2	1
CO5	3	1

UNIT – I

Concept of Valuation

Fundamental Distinctions in Valuation, Types and Forms of Value, Purposes of Valuation, Factors Influencing Real Estate Value, The Four Elements of Value (DUST) (Demand, Utility, Scarcity and Transferability).

UNIT – II

Basic Principles and Procedures of Valuation

Foundations of Real Estate Valuation, Economic Principles of Valuation, Legal and Regulatory Framework, Real Estate Market Analysis.

UNIT – III

Cost, Price & Value

Meaning of Cost, Price & Value, Relationship Between Cost, Price & Value, Types and Bases of Value, Determinants of Value, Cost in Valuation Practice, Price Behaviour in Real Estate Markets, Value Theory in Real Estate, Measurement and Application.

UNIT – IV

Legal Perspective in the Procedure of Valuation

Legal Foundations of Property Rights, Statutory Framework Governing Valuation, Valuation for Legal Purposes, Legal Procedures in the Valuation Process, Professional Liability and Negligence, Ethical and Regulatory Compliance, Judicial Precedents and Case Law Analysis.

UNIT – V

Valuation Standards

Introduction to Valuation Standards, Global Professional Valuation Bodies and Their Standards, Bases of Value under Standards, Scope of Work and Terms of Engagement, Ethics and Professional Conduct, Valuation Reporting Standards, Valuation in Specialized Contexts, Contemporary Issues in Valuation Standards.

Text Books

1. Principles and Practice of Valuation, Banerjee, Eastern Law House, Latest Edition. *(ISBN: 978-8171773152)*
2. The Appraisal of Real Estate, Appraisal Institute, 15th Edition, 2020. *(ISBN: 978-1935328667)*

Refence Books

1. The Appraisal of Real Estate, Appraisal Institute, 15th Edition, 2020. *(ISBN: 978-1935328780)*
2. The Student Handbook to The Appraisal of Real Estate, Mark R. Ratterman, Appraisal Institute, 15th Edition, 2020.

Web Links

1. **https://ibbi.gov.in**
2. **https://www.ivsc.org**

LAND, LAND SURVEYING AND LAND RECORD & REVENUE SYSTEM IN INDIA

Course Code: 2618CE03

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Understand the Legal, Physical, and Documentary aspects of Land that directly affect its Value.

CO 2: Understand the classification of Land and Land Tenure Systems in India.

CO 3: Gain Knowledge of Land Measurement and Demarcation, interpret Survey Maps and Layout Plans and understand Boundaries and Site Verification for Valuation Purposes.

CO 4: Know the Land Record Systems of India and various Documents related to Land.

CO 5: Equip with comprehensive knowledge of Land Characteristics, Surveying Techniques, and Indian Land Record Systems, enabling accurate, reliable, and legally sound Land Valuation.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	-	-	-	1	1
CO2	3	-	-	-	1	1
CO3	3	2	-	2	1	2
CO4	3	-	-	-	2	2
CO5	3	2	3	3	2	2

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	2	3
CO2	2	3
CO3	3	3
CO4	2	3
CO5	3	3

UNIT – I

Land Use Planning & Zoning Regulation

Foundations & Legal Framework of Land Use Planning, GIS and Spatial Planning, Sustainable Land Use Planning, Rural & Regional Planning, Risk, Resilience & Disaster Planning, Fundamentals & Legal Aspects of Zoning, Zoning Classifications & Land Use Controls,
Comparative Zoning Systems, Zoning and Property Valuation, Environmental & Risk-Based Zoning.

UNIT – II

Types of Land, Difference between Land and Plot

Types & Classification of Land, Land Characteristics, Highest and Best Use (HBU) across Land Types, Difference Between Land & Plot, Risk & Investment Perspective, Urban & Rural Land.

UNIT – III

Fundamental Principles and Concepts of Surveying

Introduction to Surveying, Basic Principles of Surveying, Units of Measurements, Brief History of Weights & Measurements, Area Determination, Plotting and Mapping, Setting Out and Engineering Survey Basics, Survey Records and Documentation, Applications of Surveying in Valuation.

UNIT – IV

Key Surveying Techniques & Methods

Key Surveying Techniques & Methods, GPS (Global Positioning System) Surveying, Advanced and Specialized Surveying, Applications and Impact, Future Trends.

UNIT – V

Land Revenue Systems (Colonial Period) in India

Historical Background, Major Land Revenue Systems Introduced by the British: Permanent Settlement (Zamindari System) – 1793, Ryotwari System, Mahalwari System, Comparative Analysis of Revenue Systems, Land Survey & Settlement Procedures, Economic & Social Impact, Legal & Institutional Developments, Relevance to Modern Valuation Studies.

Text Books

Surveying Vol I, B.C. Punmia, Laxmi Publications, Latest Edition. (ISBN: 978-8131808146)

Surveying and Levelling, S.K. Duggal, Tata McGraw Hill, Latest Edition. (ISBN: 978-0070648289)

Reference Books

Fundamentals of Surveying, S.K. Roy, Prentice Hall India, Latest Edition. (ISBN: 978-8120349872)

Engineering Surveying, W. Schofield, Butterworth-Heinemann, 6th Edition, 2007. (ISBN: 978-0750669498)

Web Links

1. **https://bhunaksha.gov.in**
2. **https://nptel.ac.in/courses/105**

LAWS -1

Course Code: 2618CE04

L	T	P	C
4	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Acquaint themselves with the Legal Framework governing Property Rights, Transfer of Assets and how Legal Disputes affect Property and Asset Valuation, ensuring Legally Sound and Defensible Valuation Practice.

CO 2: Understand Fundamental Rights related to Property, Constitutional provisions affecting Land Acquisition, Legal Protection of Ownership Rights.

CO 3: Learn about legal modes of Transfer and the Agreements related to Sale, Lease, Mortgage, and Development, identify Void and Voidable Contracts and assess Contractual Obligations affecting Property Value

CO 4: Understand Alternative Dispute Resolution (ADR) Mechanisms, how Valuation is used in Dispute Settlements and study the Role of Valuers as Expert Witnesses.

CO 5: Learn Rights and Liabilities of Buyers and Sellers and examine legal validity of Property Transactions.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3	-		2	2
CO2	2	-	-		2	2
CO3	3	2	-		2	2
CO4	2	-	-		1	2
CO5	3	2	-		2	2

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	3	3
CO4	3	3
CO5	3	3

UNIT – I

Introduction to the Legal System in India

Historical Background of the Indian Legal System, Sources of Law in India, Structure of the Indian Legal System & Hierarchy, Property Laws in India, Corporate & Commercial Laws

Relevant to Valuation, Taxation Laws Impacting Valuation, Evidence & Limitation Laws, Regulatory Framework for Valuers.

UNIT – II

Constitution of India

Historical Background & Formation, Preamble – Relevance to Economic & Property Rights, Fundamental Rights (Part III), Directive Principles of State Policy (Part IV), Fundamental Duties (Part IVA), Structure of Government, Federal Structure & Distribution of Powers, Amendment of the Constitution (Article 368) & Its Impact on Property and Economic Laws, Constitutional Provisions Affecting Valuation Practice.

UNIT – III

Indian Contract Act, 1872

Introduction & Scope of the Act, Essential Elements of a Valid Contract, Offer & Acceptance, Consideration, Capacity of Parties, Free Consent, Legality of Object & Consideration, Agreements Expressly Declared Void, Contingent Contracts, Performance of Contracts, Breach of Contract & Remedies, Indemnity & Guarantee.

UNIT – IV

Arbitration & Conciliation Act, 1996

Introduction & Objective of the Act, Key Definitions, Arbitration Agreement, Types of Arbitration, Composition & Jurisdiction of Arbitral Tribunal, Conduct of Arbitral Proceedings, Arbitral Award, Enforcement of Award, Conciliation, Interim Measures by Court, Role of Courts, Relevance to Valuation Practice.

UNIT – V

Transfer of Property Act, 1882 & Easement

Transfer of Property Act, 1882: Introduction and Scope, Transfer of Immovable Property, Sale, Mortgage, Lease, Gift and Exchange, Actionable Claims, Doctrine of Lis Pendens, Doctrine of Part Performance, Fraudulent Transfer, Indian Easements Act, 1882: Introduction to Easements, Types of Easements, Modes of Acquisition, Restrictive Covenants, Extinction and Suspension of Easements.

Text Books

1. Law of Contract, Avtar Singh, Eastern Book Company, Latest Edition. *(ISBN: 978-9351453956)*
2. Transfer of Property Act, Mulla, LexisNexis, Latest Edition. *(ISBN: 978-9386515889)*

Reference Books

1. Introduction to the Constitution of India, D.D. Basu, LexisNexis, Latest Edition. *(ISBN: 978-9389991635)*
2. Law of Property, Poonam Pradhan Saxena, LexisNexis, Latest Edition. *(ISBN: 978-9350353431)*

Web Links

1. **https://indiacode.nic.in**
2. **https://legislative.gov.in**

CIVIL CONSTRUCTION PRACTICES AND MATERIAL SCIENCE

Course Code: 2618CE05

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Identify different types of Foundations, Structural Systems and recognize Construction methods used in Residential, Commercial, and Industrial Buildings.

CO 2: Understand Physical and Mechanical properties of materials and evaluate Durability, Strength, Workability, Performance and suitability for different types of Buildings.

CO 3: Assess Quality of Construction and detect common Construction Defects and Failures.

CO 4: Inspect properties effectively, prepare Technical Descriptions for Valuation Reports, support Fair Market Value determination and evaluate compliance during Valuation Inspections.

CO 5: Equip themselves with Technical Knowledge of Construction and Materials so they can accurately assess Building condition, estimate Depreciation, determine Replacement Cost and arrive at reliable Property Valuation.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	-	-	-	1	2
CO2	3	-	-	-	1	2
CO3	3	3	-	2	2	2
CO4	3	3	-	2	2	2
CO5	3	3	-	2	2	2

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	3	3
CO4	3	3
CO5	3	3

UNIT – I

Types of Structures

Classification Based on Structural System, Classification Based on Construction Material, Classification Based on Usage (Important for Valuation), Classification Based on Design and Construction Type, High-Rise vs Low-Rise Structures, Special Structures (Advanced Valuation Topic), Structural Life and Depreciation.

UNIT – II

Types of Building

Classification Based on Occupancy (As per Building Use), Classification Based on Structure, Special Purpose Buildings (Advanced Valuation Topic), Mixed-Use Buildings, Concept of Green Building.

UNIT – III

Cost of Construction

Introduction to Cost of Construction, Types of Construction Cost, Components of Construction Cost, Methods of Estimating Construction Cost, Factors Affecting Cost of Construction, Depreciation and Construction Cost, Cost Indices and Rate Analysis, Land and Building Cost Separation, Salvage and Scrap Value, Application in Valuation
Practice.

UNIT – IV

Building Pathology

Introduction to Building Pathology, Causes of Building Defects, Structural and Non- Structural Defects, Dampness and Moisture Problems, Cracks in Buildings, Corrosion and Material Deterioration, Foundation Problems, Building Inspection Techniques, Maintenance and Repair Strategies, Depreciation Due to Defects, Reporting in Valuation
Practice, Legal and Safety Implications.

UNIT – V

Engineering Materials

Introduction to Engineering Materials, Stone, Bricks and Blocks, Cement, Concrete,
Steel, Timber, Finishing Materials, Roofing Materials, Modern & Sustainable Materials, Material Quality and Depreciation, Material Selection and Cost Implications.

Text Books

1. Construction Technology, R. Chudley, Pearson Education, 5th Edition. *(ISBN: 978-0582236714)*
2. Building Materials, S.K. Duggal, New Age International, 4th Edition. *(ISBN: 978-8122427844)*

Reference Books

1. Building Construction, B.C. Punmia, Laxmi Publications, Latest Edition. *(ISBN: 978-8131804285)*
2. Engineering Materials, Surendra Singh, Vikas Publishing, Latest Edition. *(ISBN: 978-8125930945)*

Web Links

1. **https://nptel.ac.in/courses/105**
2. **https://www.nbmcw.com**

URBAN LAND ECONOMICS & TOWN PLANNING

Course Code: 2618CE06

L	T	P	C
4	-	-	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Understand Urban Land Economics and its relevance in Property Valuation and integrate it in practical Valuation Reports.

CO 2: Analyze Planned V. Unplanned Developments, learn energy-efficient and sustainable construction practices and their Impact on Property Values

CO 3: Analyze Real Estate Market, examine Market Forces Shaping Urban L and Values, Infrastructure Impact on Property Appreciation and Urban Growth Trends.

CO 4: Conduct Site Analysis and Urban Land Studies enabling them to compare Land Values in different Urban Zones, incorporate Planning Regulations, Development Potential, risk assessment, feasibility in urban projects and Restrictions into Valuation.

CO 5: Develop Skills to forecast urban property trends, growth areas and understand legislations and their impact on Land Valuation.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3				2	3
CO2	2	3		1	2	3
CO3	2	3		1	3	3
CO4	1	3		1	3	3
CO5	1			1	3	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	3	3
CO4	3	3
CO5	3	3

UNIT – I
Town & Country Planning

Unit – II
Urban Development Finance
Introduction to Urban Development Finance, Sources of Urban Finance, Property Tax System, Development Charges and Impact Fees, Urban Infrastructure Financing Programs,
Land Value Capture (LVC) Mechanisms, Urban Infrastructure and Property Value, Cost– Benefit Analysis in Urban Projects, Risk and Credit Assessment.

UNIT – III
Urban Planning
Introduction and Definition of Urban Planning, Urbanization and Growth of Cities, Master Plan / Development Plan, Development Control Regulations, Infrastructure and Services in Urban Planning, Subdivision and Plotting, Environmental Planning and Green Zones, Legal & Regulatory Framework,
Land Value and Urban Planning, Emerging Trends in Urban Planning, Land Use Conversion.

UNIT –IV
Green Building
Introduction to Green Building, Principles of Green Building, Energy Efficiency in Buildings, Water Conservation, Sustainable Materials, Waste Management, Green Building Economics, Rating & Performance Metrics, Regulatory Framework and Incentives in India, Impact on Property Valuation,
Emerging Trends in Green Buildings.

UNIT -V
Building Byelaws
Introduction to Building Byelaws, Approval & Permissions, Land Use and Zoning Compliance, Floor Area Ratio (FAR) / Floor Space Index (FSI), Building Height and Storey Regulations, Coverage and Density Controls, Safety & Fire Regulations, Sanitary & Water Supply Regulations, Environmental & Green Norms, Heritage / Special Zone Regulations, Penalties & Legal Consequences, Building Byelaws and Valuation.

Text Books

1. Urban Economics, Arthur O'Sullivan, McGraw Hill, 9th Edition. *(ISBN: 978-0078021787)*
2. Town Planning, Rangwala, Charotar Publishing House, Latest Edition. *(ISBN: 978-9385039324)*

Reference Books

1. Urban and Regional Planning, Peter Hall, Routledge, 5th Edition. *(ISBN: 978-0415663563)*
2. Land Economics, T.H. Hutchison, Cambridge University Press. *(ISBN: 978-0521095619)*

Web Links
1. https://mohua.gov.in
2. https://nptel.ac.in

QUANTITY SURVEY & ESTIMATION

Course Code: 2618CE07

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1:	Learn and apply Quantity Surveying Techniques in Real Estate Valuations.
CO 2:	Gain knowledge of Types & Methods of Cost Estimation, Analysis of Rates, prepare BOQ and Tender Documents.
CO 3:	Understand impact of inflation, market trends, material availability on costs and evaluate variations and cost overruns.
CO 4:	Incorporate construction quality, design and material choice in valuation reports and support investment decisions and feasibility studies.
CO 5:	Learn Standard measurement codes, construction measurement units and valuation norms.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3		3	3	3
CO2	3	3		2	3	3
CO3	3	3		1	3	3
CO4	2	3		1	3	3
CO5	3	1		1	2	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	3	3
CO4	3	3
CO5	3	3

UNIT - I

Types & Purpose of Estimates

Introduction to Estimates, Purpose of Estimates, Types of Estimates, Elements Considered in Estimates, Relationship with Valuation.

UNIT – II

General Rules of Measurement

Introduction to Measurement in Valuation, Units of Measurement, Measurement of Land, Measurement of Building, Measurement of Components, Standard Measurement Rules, Measurement Standards / Guidelines.

UNIT – III

Methods of Estimation & Rate Analysis

Introduction to Estimates and Rate Analysis, Approximate / Preliminary Estimate, Detailed / Item-Wise Estimate, Revised / Supplementary Estimate, Plinth Area / Cubical Content Estimate, Service Unit Method, Definition of Rate Analysis, Components of Rate Analysis, Standard Schedule of Rates,

Methods of Applying Rate Analysis, Factors Affecting Rate Analysis, Application in Valuation.

UNIT – IV

Quantity Surveying

Introduction to Quantity Surveying, Scope of Quantity Surveying, Units of Measurement, Methods of Measurement, Bill of Quantities, Estimation Techniques in Quantity Surveying, Rate Analysis in Quantity Surveying, Cost Control and Financial Management, Depreciation and Remaining Economic Life, Surveying Tools & Techniques, Special Consideration for Valuation, Reporting for Valuation, Estimation and Measurement (For Capitalized/Replacement Value).

UNIT – V

Key Roles of Quantity Surveyor

Cost Planning & Estimation, Preparation of Bill of Quantities (BOQ), Tendering & Procurement, Contract Administration, Cost Control & Financial Management, Valuation of Work Done, Risk Management, Advisory Role.

Text Books

1. Civil Engineering Quantities, Ivor H. Seeley, Palgrave Macmillan. *(ISBN: 978-0333928660)*
2. Cost Planning of Buildings, Ferry & Brandon, Wiley-Blackwell. *(ISBN: 978-1405162159)*

Reference Books

1. Estimating and Costing in Civil Engineering, B.N. Dutta, UBS Publishers. *(ISBN: 978-8189928223)*
2. Quantity Surveying and Valuation, K.K. Chitkara, Tata McGraw Hill. *(ISBN: 978-0074620137)*

Web Links

1. https://cpwd.gov.in

ENVIRONMENTAL ISSUES IN VALUATION

Course Code: 2618CE08

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Comprehend impact of environmental conditions on property value

CO 2: Recognize sustainability and environment risks as critical components in valuation

CO 3: Understand compliance requirements and their impact on development potential and property values.

CO 4: Identify environmental hazards affecting property and evaluate market perception and demand influenced by environmental quality and integrate environmental, legal and financial aspects into valuation reports.

CO 5: Learn remediation and mitigation measures allowing long-term value appreciation due to sustainable practices.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	2	3			3	3
CO2	2	3			3	3
CO3	3	1			3	3
CO4	3	3			3	3
CO5	3	3		2	3	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	3	3
CO4	3	3
CO5	3	3

UNIT – I

Basics of Laws related to Environment, Health & Safety (EHS)

Introduction to EHS Laws, Environmental Protection Laws, Environmental Regulatory Authorities, Health & Safety Laws in Construction and Industry, Hazardous Substances and Risk Management, Building and Environmental Clearances, Penalties and Legal Consequences, Impact of EHS Laws on Property Valuation.

UNIT – II

Environmental Protection Act, 1986

Objective and Scope of the Act, Definitions, Power to Issue Directions, Standards for Emission or Discharge, Handling of Hazardous Substances, Inspection and Sampling
Powers, Environmental Impact Assessment (EIA), Rules Framed Under the Act.

UNIT – III

Issues of Air Pollution, Water Pollution and Noise Pollution

Air Pollution: Meaning and Types of Air Pollutants, Sources of Air Pollution (Industries, Vehicles, Power Plants, Construction), Air Quality Standards (AQI Concept), Health and Environmental Impacts, Legal Provisions and Regulatory Authorities, Impact on Land Use and Zoning Restrictions, Water Pollution: Meaning and Types of Water Pollutants, Sources (Industrial Discharge, Sewage, Agricultural Runoff), Wastewater Treatment Methods, Legal Control Measures, Water Quality Monitoring, Noise Pollution: Meaning and Measurement of Noise, Sources (Traffic, Airports, Industries, Construction),
Permissible Noise Limits (Residential, Commercial, Industrial Zones), Regulatory Norms.

UNIT – III

Environmental-Friendly and Sustainability in Valuation

Introduction to Sustainability in Real Estate, Energy Efficiency and Renewable Energy, Water Conservation and Waste Management, Sustainable Materials and Construction Practices, Climate Risk and Environmental Risk Assessment, Sustainable Urban Planning,
Financial Implications of Sustainability.

UNIT – IV

ESG (Environmental, Social, Governance) in Real Estate

ESG Reporting & Disclosure Standards, Carbon Disclosure Requirements, Environmental (E): Energy Efficiency and Carbon Footprint, Renewable Energy Integration (Solar, Wind), Environmental Compliance, Net-Zero and Low-Carbon Buildings, Environmental Due Diligence in Property Inspection, Social (S): Affordable Housing Initiatives, Community Impact and Social Infrastructure, Accessibility (Universal Design, Disabled-Friendly Access), Health & Safety Standards and Diversity and Inclusion in Workplace Buildings, Governance (G): Corporate Governance in Real Estate Firms, Transparency in Financial Reporting,
Regulatory Compliance, Ethical Business Practices, Risk Management and Internal Controls.

Text Books

1. Environmental Engineering, Peavy & Row, McGraw Hill. *(ISBN: 978-0070491342)*
2. Environmental Studies, Benny Joseph, McGraw Hill. *(ISBN: 978-0070700222)*

Reference Books

1. Environmental Impact Assessment, Larry W. Canter, McGraw Hill. *(ISBN: 978-0073397924)*
2. Sustainable Development, K. Dhameja, S. Chand Publications. *(ISBN: 978-8121926515)*

Web Links

1. https://moef.gov.in

LAWS -II

Course Code: 2618CE09

L	T	P	C
4	-	-	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Learn the legal principles of evidence relevant to property disputes, types of evidence, comprehend admissibility, relevancy and weight of evidence in valuation disputes.

CO 2: Enhance accuracy and defensibility of valuation conclusions in litigation.

CO 3: Learn valuation of assets in insolvency and liquidation proceedings and the role of registered valuers under IBC regulations.

CO 4: Apply succession principles in valuation of inherited or co-owned properties, impact of family settlements and partition on valuation

CO 5: Integrate taxation and limitation considerations in valuation

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3			2	3
CO2	2	3			3	3
CO3	3	3		1	3	3
CO4	3	3			3	3
CO5	3	3			3	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	3	3
CO4	3	3
CO5	3	3

Unit -1

Law of Evidence

Meaning and Scope of Law of Evidence, Relevance to Valuation Practice, Burden of Proof in Valuation Disputes, Admissible vs. Inadmissible Evidence, Documentary vs. Oral Evidence, Primary and Secondary Evidence, Electronic Evidence in Valuation, Expert Witness, Role of Registered Valuer as Expert, Expert Opinion under Evidence Law, Admissibility of Expert Reports, Cross-Examination of Valuation Expert, Duties and Liabilities of Expert Witness, Evidence in Property and Land Acquisition Cases, Case Laws
Relevant to Valuation Evidence.

UNIT- II

Insolvency & bankruptcy Code, 2016

Introduction to IBC (Objectives, Purpose, Applicability, Scope, and Structure of the Code), Key Definitions (Corporate Debtor, Financial Creditor, Operational Creditor), Role of Insolvency and Bankruptcy Board of India (IBBI), National Company Law Tribunal (NCLT) and National Company Law Appellate Tribunal (NCLAT), Insolvency Professionals (IP), Registered Valuers and Information Utilities (IU) – Eligibility, Appointment and Role under IBC, Corporate Insolvency Resolution Process (CIRP), Valuation under CIRP, Liquidation Process, Fast Track and Pre-Pack Insolvency, Insolvency Resolution Plan & Valuation, Cross-Border Insolvency, Key Judicial Pronouncements Affecting Valuation, Ethical and
Professional Responsibilities.

UNIT- III

Laws Related to Succession & Inheritance

Meaning of Succession and Inheritance, Movable vs. Immovable Property, Relevance of Succession Laws in Valuation, Indian Succession Act, 1925, Hindu Succession Act, 1956 (as amended in 2005), Wills and Testamentary Documents, Probate, Letters of Administration & Succession Certificate, Joint Ownership & Survivorship, Partition of Property, Estate Valuation for Tax & Legal Purposes, Inheritance & Transfer of Business Interests, Disputes & Litigation in Inheritance, Role of Valuer in Succession Matters.

UNIT-IV

Limitation Act, 1963

Object and Purpose of the Act, Concept of Limitation Period, Meaning of "Time-Barred Claim", Relevance in Valuation Assignments, Computation of Limitation Period, Limitation for Suits Relating to Property, Adverse Possession & Its Valuation Impact, Impact on Valuation Methodology, Limitation in Contractual & Debt Claims, Impact on Valuation of Stressed Assets, Role of Valuer in Time-Barred Assets, Key Judicial Pronouncements.

UNIT V

Income Tax Act, 2025 & 1961

Fundamentals of Income Tax for Valuers, Capital Gains & Property Valuation, Valuation under Rule 11UA (1961 Act Framework), Stamp Duty & Circle Rate Implications, Income- Tax Act, 2025 (New Code Perspective), Digital & Faceless Assessment Impact, Litigation, Assessment & Practical Case Studies, National Housing & Habitat Policy, Urban Development and Housing Policies

Text Books

1. Law of Evidence, Batuk Lal, Central Law Agency. *(ISBN: 978-8190857482)*
2. Insolvency and Bankruptcy Code, Taxmann Publications. *(ISBN: 978-9390831913)*

Reference Books

1. Insolvency and Bankruptcy Code, Taxmann Publications, Latest Edition. *(ISBN: 978-9390831913)*
2. Income Tax Law and Practice, V.K. Singhania, Taxmann Publications. *(ISBN: 978-9390831142)*

Web Links

1. **https://ibbi.gov.in**
2. **https://indiacode.nic.in**

VALUATION-II

Course Code: 2618CE10

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Understand and develop ability to select appropriate Valuation Method based on Property Type, Use and Market Context.

CO 2: Apply YP in Rental Property Valuation, Leasehold Interest and Ground Rent Assessment.

CO 3: Compare Freehold v Leasehold Valuation Outcomes for Investment Decisions.

CO 4: Analyze Risk, Sensitivity and Feasibility in Development-based Valuation.

CO 5: Develop Risk Adjusted Valuation Skills for Insured and Damaged Properties.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3		2	2	3
CO2		3				
CO3	3	3			3	2
CO4	3	3		2	2	2
CO5	3	3		1	2	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	2	3
CO4	3	3
CO5	3	3

UNIT I

Methods and Approaches of Valuation

Income Approach: Discounted Cash Flow (DCF) Method, Capitalization of Earnings Method, Market Approach: Comparable Company Multiple (Trading Multiples), Comparable Transaction Method, Asset-Based Approach: Net Asset Value (NAV) Method, Book Value vs Market Value, Adjusted Net Asset Method, Replacement Cost Method, Liquidation Value Method.

UNIT – II

Year's Purchase (YP) Types & Tables

Meaning, Types and Applications of Year's Purchase, YP as Capitalization Factor, Difference between YP and Multiplier, Basic Formulae of Year's Purchase, Income Capitalization Principle, Role of Risk & Yield in YP, Relationship between YP and Rate of Return, YP and Present Value Factor, YP and Sinking Fund Factor, YP and Annuity Factor, Year's Purchase Tables, Numerical & Case Study Topics,
Relationship with Modern Valuation Methods.

UNIT- III

Valuation of Freehold and Leasehold Properties

Meaning of Freehold Property, Meaning of Leasehold Property, Legal & Regulatory Framework, Valuation of Freehold Property: Capitalization Method, Market Approach, Cost Approach, DCF Method, Valuation of Leasehold Property: Valuation of Leasehold Interest (Lessee's Interest), Valuation of Lessor's Interest, Valuation of Lease Premium, Special Situations in Leasehold Valuation, Reversionary & Deferred Interests, Factors Affecting Value, Case Studies & Applications.

UNIT IV

Developmental Method of Valuation

Meaning and Applicability of Development Method, Difference between Development Method and DCF, Situations Suitable for this Method: Vacant Land, Redevelopment Property, Sub-Division Projects, Slum Redevelopment, Industrial Layout Planning, Concept of Residual Valuation, Steps in Developmental Valuation, Components of Gross Development Value (GDV), Development Costs – Detailed Classification, Developer's Profit, Time Factor & Discounting, Sensitivity & Risk Analysis, Advantages & Limitations.

UNIT V

Principles of Insurance and Loss Assessment

Meaning, Objectives and Types of Insurance, Legal Framework, Basic Principles of Insurance, Types of Insurance Covers, Loss Assessment & Its Techniques, Role of Valuation in Insurance, Risk & Premium Considerations, Case Studies & Applications, Regulatory Framework.

Text Books

1. Real Estate Finance and Investments, Brueggeman & Fisher, McGraw Hill. *(ISBN: 978-0078023071)*
2. Investment Valuation, Aswath Damodaran, Wiley. *(ISBN: 978-1118011522)*

Reference Books

1. Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, Aswath Damodaran, Wiley, 3rd Edition, 2012. *(ISBN: 978-1118011522)*
2. Valuation: Measuring and Managing the Value of Companies, McKinsey & Company, Wiley, 6th Edition, 2015. *(ISBN: 978-1118873700)*

Web Links

1. https://ibbi.gov.in
2. https://www.ivsc.org

VALUATION-III

Course Code: 2618CE11

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Apply advanced valuation methods for complex real estate assets including income-producing properties.

CO 2: Analyze market dynamics and risk factors influencing property valuation.

CO 3: Evaluate investment decisions using discounted cash flow and financial modelling techniques

CO 4: Assess special valuation cases such as redevelopment, leasehold, and distressed properties.

CO 5: Prepare professional valuation reports in compliance with national and international standards

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3		2	2	3
CO2		3				
CO3	3	3			3	2
CO4	3	3		2	2	2
CO5	3	3		1	2	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	2	3
CO4	3	3
CO5	3	3

UNIT I

Valuation of Special Properties- Hotels, Hospitals, Educational Buildings, Government Buildings, Religious Buildings etc.

Definition and Characteristics of Special-Purpose Properties, Difference between General Real Estate and Special Properties, Limited Marketability and Lack of Comparable Sales, Going-Concern Concept, Highest and Best Use (HBU) Considerations, Regulatory and Operational Dependency, Valuation Approaches for Special Properties, Depreciation in Special Properties, Intangible Assets in Special Property Valuation, Legal & Regulatory Framework, Risk Analysis in Special Property Valuation, Case Studies & Practical Applications.

UNIT II

Mergers & Acquisitions

Meaning and Definition of M&A, Difference between Merger, Acquisition, Amalgamation & Takeover, Asset Purchase vs. Share Purchase, Role of Valuation in M&A, Valuation Approaches in Real Estate M&A, Due Diligence in Real Estate M&A, Real Estate Specific Considerations, Cross-Border Real Estate M&A, Regulatory & Legal Framework, Risk Analysis in M&A, Distressed Asset Acquisition, Case Studies & Practical Applications.

UNIT III

Distressed Asset Valuation

Meaning and Definition of Distressed Assets, Causes of Financial Distress in Real Estate, Types of Distressed Real Estate Assets, Legal & Insolvency Framework, Valuation Bases in Distress Situations, Valuation Approaches for Distressed Assets, Discounting & Risk Assessment, Real Estate-Specific Issues, Role of Banks & Financial Institutions, REIT & Corporate Distress Valuation, Auction & Bidding Mechanisms, Ethical Issues in Distressed Valuation, Case Studies & Practical Applications.

UNIT IV

Valuation under Income Tax Act, 1961/2025 & DCF Valuation Method

Valuation under Income Tax Act, 1961/2025: Purpose of Valuation under Taxation Laws, Role of Registered Valuer under Income Tax Rules, Capital Gains and Deemed Income Provisions, Valuation under Rule 11UA & 11U, Stamp Duty Value & Circle Rates, Transfer Pricing & International Transactions, Tax Implications of Real Estate Valuation, DCF Method of Valuation: Introduction to DCF Method and its Relevance in Real Estate & Tax Valuation, Components of DCF Model, Determination of Discount Rate, Terminal Value Estimation, DCF in Real Estate Projects, Common Errors in DCF
Valuation.

UNIT V

Valuation of Defects in Building and Cost of Restoration

Meaning and Definition of Building Defects, Difference between Defect, Damage, and Deterioration, Importance of Defect Valuation in Property Appraisal, Impact of Defects on Market Value, Classification of Building Defects, Causes of Building Defects, Inspection & Identification of Defects, Valuation Principles Related to Defects, Methods of Valuing Defects, Cost of Restoration & Repair Estimation, Valuation of Partially Damaged Buildings, Legal & Contractual Aspects, Risk Assessment in Defective
Buildings, Valuer's Responsibility & Disclaimer.

Text Books

1. Real Property Valuation in Condemnation, Appraisal Institute, 2018. *(ISBN: 978-1935328742)*
2. Property Investment Appraisal, Andrew Baum, Wiley Blackwell, 3rd Edition. *(ISBN: 978-1405190886)*

Reference Books

1. Property Investment Appraisal, Andrew Baum, Wiley Blackwell *(ISBN: 978-1405190886)*
2. Damodaran on Valuation, Aswath Damodaran, Wiley. *(ISBN: 978-0471414907)*

Web Links

1. **https://www.ivsc.org**
2. **https://ibbi.gov.in**

COMPUTER SKILLS & DIGITAL TECHNOLOGIES

Course Code: 2618CE12

L	T	P	C
2	-	2	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Demonstrate proficiency in basic computer applications and office productivity tools.

CO 2: Apply spreadsheet tools (Excel) for data analysis and financial computations

CO 3: Utilize digital technologies such as GIS and software tools for property analysis.

CO 4: Analyze real estate data using data analytics techniques and visualization tools.

CO 5: Integrate digital platforms and tools for effective decision-making in valuation practice.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3		2	2	3
CO2		3				
CO3	3	3			3	2
CO4	3	3		2	2	2
CO5	3	3		1	2	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	2	3
CO4	3	3
CO5	3	3

UNIT-I

Computer Hardware & Software

Introduction to Computer Systems, Importance of IT in Real Estate Valuation, Evolution of Digital Tools in Property Appraisal, Role of Automation in Valuation Practice, Basic Components of Computer Hardware, Peripheral Devices in Valuation Work, Data Storage & Backup Systems, Networking & Internet Basics, Geographic Information Systems (GIS), Computer-Aided Design (CAD), Data Analysis & Visualization Tools.

UNIT II

Operating Systems

Introduction to Operating Systems, Common Operating Systems Used in Valuation Practice, File Management & Organization, User Account & Access Control, Security Features in Operating Systems, Software Installation & Updates, Troubleshooting & Maintenance, Operating Systems & Valuation Workflow Integration, Cloud & Virtual Operating Environments.

UNIT III

Microsoft Office

Introduction to Microsoft Office, Importance of MS Office in Valuation Practice, Data Management and Documentation Workflow, Integration between Word, Excel & PowerPoint, Microsoft Word (Valuation Report Preparation), Microsoft Excel, Real Estate Applications, Microsoft PowerPoint (Professional Presentation Skills), Microsoft Outlook & Collaboration, Integration & Automation.

UNIT IV

Valuation Related Software & Tools

Introduction & Importance of Software in Modern Real Estate Valuation, Benefits of Automation & Accuracy, Types of Valuation Software, Integration with MS Office & GIS Tools, Financial & DCF Modeling Tools, Automated Valuation Models (AVM), Real Estate Cost Estimation & Construction Software, Geographic Information Systems (GIS), Computer-Aided Design (CAD) & Building Modeling Tools, Legal & Compliance Tools.

UNIT V

AI in Valuation

Definition of Artificial Intelligence (AI), Importance of AI in Real Estate and Property Valuation, Difference between Traditional Valuation and AI-Assisted Valuation, Advantages: Speed, Accuracy, Predictive Capability, Types of AI Techniques Used in Valuation, Data Sources for AI in Real Estate, AI-Based Predictive Analytics, Image & GIS-Based AI Valuation, AI in Risk Assessment, Integration of AI with Traditional Valuation Methods, Software & Platforms Using AI in Valuation, Challenges and Limitations of AI in Valuation.

Text Books

1. Computer Fundamentals, P.K. Sinha, BPB Publications. *(ISBN: 978-8176567527)*
2. Excel Data Analysis, Hector Guerrero, Springer. *(ISBN: 978-3030012557)*

Reference Books

1. Data Science for Business, Foster Provost, O'Reilly Media, 2013. *(ISBN: 978-1449361327)*
2. GIS Fundamentals: A First Text on Geographic Information Systems, Paul Bolstad, Eider Press. *(ISBN: 978-1593995522)*

LAWS-III

Course Code: 2618CE13

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Explain key provisions of real estate regulatory frameworks including RERA.

CO 2: Interpret legal aspects related to land acquisition, registration, and stamp duties.

CO 3: Analyze financial and recovery laws such as SARFAESI and their impact on valuation.

CO 4: Evaluate legal risks and compliance issues in real estate transactions.

CO 5: Apply legal knowledge in preparing compliant valuation reports and documentation.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3		2	2	3
CO2		3				
CO3	3	3			3	2
CO4	3	3		2	2	2
CO5	3	3		1	2	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	2	3
CO4	3	3
CO5	3	3

UNIT I

Laws related to Real Estate Valuation

Importance of Legal Knowledge in Property Valuation, Role of Laws in Protecting Buyers, Lenders, and Valuers, Legal Risk in Valuation, Transfer of Property (Indian Transfer of Property Act, 1882), Real Estate (Regulation and Development) Act, 2016 (RERA), Land Acquisition, Rehabilitation and Resettlement Act, 2013 (LARR), Urban Land (Ceiling and Regulation) Act, 1976, Registration Process under Registration Act, 1908, Rent Control Acts.

UNIT II

Indian Stamp Act, 1899

Introduction & Purpose of the Indian Stamp Act, 1899, Importance in Real Estate Transactions and Valuation, Relationship between Stamp Duty Value and Fair Market Value (FMV), Definitions & Key Concepts, Instruments Related to Real Estate, Methods of Stamp Duty Valuation, Stamp Duty and Market Value, State Variations in Stamp Duty, Role of Stamp Duty in Real Estate Valuation.

UNIT III

Land revenue Code

Purpose of Land Revenue Laws in India, Historical Perspective: From Zamindari to Modern Land Revenue Codes, Importance of Land Records in Real Estate Valuation, Key Definitions under Land Revenue Code, Classification of Land, Land Records & Documentation, Assessment & Collection of Land Revenue, Land Revenue & Property Valuation, Land Acquisition Laws under Revenue Codes, State-Specific Variations.

UNIT IV

The SARFAESI Act, 2002

Purpose, Scope and Applicability of SARFAESI Act, 2002, Role of the Act in Property Valuation for Distressed Assets, Key Definitions, Role of Valuers in SARFAESI, Methods of Asset Sale, Legal & Regulatory Compliance, Distressed Asset Valuation Considerations.

UNIT V

Case Laws & Case Studies

Valuation Methodology for Determining Market Value, Belting Theory, Comparison of Small and Larg Plots, Valuation of Irregular Shaped Plot & Land Locked Land (LLL), Valuation of Land with Multiple Owners, Joint Ownership and Tenant Occupied Property.

Text Books

1. Real Estate (Regulation and Development) Act, 2016, Taxmann. *(ISBN: 978-9387957047)*
2. Indian Stamp Act, Taxmann. *(ISBN: 978-9390831463)*

Reference Books

1. Real Estate (Regulation and Development) Act, 2016, Taxmann Publications. *(ISBN: 978-9387957047)*
2. SARFAESI Act, Taxmann Publications. *(ISBN: 978-9388266643)*

Web Links

1. **https://ibbi.gov.in**
2. **https://www.ivsc.org**

ALLIED ASSETS VALUATION

Course Code: 2618CE14

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Identify different categories of assets including plant, machinery, and intangible assets.

CO 2: Apply valuation principles to plant and machinery assets.

CO 3: Evaluate financial assets and intangible asset valuation techniques.

CO 4: Analyze sector-specific valuation practices such as agricultural and infrastructure assets.

CO 5: Prepare comprehensive valuation reports for allied asset classes

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3		2	2	3
CO2		3				
CO3	3	3			3	2
CO4	3	3		2	2	2
CO5	3	3		1	2	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	2	3
CO4	3	3
CO5	3	3

UNIT I

Plant & Machinery Valuation

Introduction to Plant & Machinery, Importance in Real Estate and Industrial Asset Valuation, Role in Project Feasibility, Corporate Valuation and Collateral Valuation, Types of Plant & Machinery, Identification & Physical Verification of Plant & Machinery, Legal & Regulatory Framework, Valuation Approach, Depreciation & Obsolescence.

UNIT II

Financial Assets Valuation

Introduction to Financial Assets, Role of Financial Assets in Real Estate Investment Decisions, Regulatory & Legal Framework, Valuation Approaches, Integration with Real Estate Valuation.

UNIT III

Agricultural Lands Valuation

Definition and Importance of Agricultural Land, Difference between Agricultural and Non-agricultural Land, Role in Taxation, Lending and Project Feasibility, Legal Framework, Factors Affecting Agricultural Land Value, Approaches to Valuation, Agricultural Land for Special Uses, Land Records & Documentation, Taxation and Financial Consideration.

UNIT IV

Intangible Asset Valuation

Definition and Importance of Intangible Assets, Distinction between Tangible and Intangible Assets, Types of Intangible Assets Relevant to Real Estate, Legal & Regulatory Framework, Methods of Valuation, Factors Affecting Intangible Asset Value, Valuation of Leasehold & Tenant Rights, Goodwill in Real Estate Companies.

UNIT V

Other Category of Valuers

IMPEX (Import & Export), Jewelry, Tea Estate, Marine Vessels & Hull, Mine, Inventory Stock, Enterprise.

Text Books

1. Valuation of Plant and Machinery, Institution of Valuers Publication. *(ISBN: 978-8190874557)*
2. Valuation: Measuring and Managing the Value of Companies, McKinsey & Company. *(ISBN: 978-1119611868)*

Reference Books

1. Valuation of Plant and Machinery, Institution of Valuers Publication. *(ISBN: 978-8190874557)*
2. Intangible Asset Valuation, Robert F. Reilly, McGraw Hill.*(ISBN: 978-0071441803)*

Web Links

1. https://ibbi.gov.in

RESEARCH, DATA ANALYTICS & PROFESSIONAL ETHICS

Course Code: 2618CE15

L	T	P	C
3	-	1	4

Course Outcomes:

At the end of the Course, Student will be able to:

CO 1: Explain research methodologies and their application in real estate studies.

CO 2: Apply statistical and analytical tools for data-driven valuation analysis.

CO 3: Interpret data using analytical techniques for decision-making.

CO 4: Demonstrate ethical practices and professional standards in valuation.

CO 5: Develop research-based reports integrating data analysis and ethical considerations.

Mapping of course outcomes with program outcomes:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6
CO1	3	3		2	2	3
CO2		3				
CO3	3	3			3	2
CO4	3	3		2	2	2
CO5	3	3		1	2	3

Mapping of course outcomes with program Specific Outcomes:

CO/PSO	PSO1	PSO2
CO1	3	3
CO2	3	3
CO3	2	3
CO4	3	3
CO5	3	3

UNIT I

Research & Research Methodology

Introduction to Research, Importance & Role of research in property valuation, Types of Research, Research Objectives in Real estate Valuation, Types of Research, Research Methodology, Data Analysis in Research, Real Estate Market Research, Legal & Compliance Research, Research Tools & Techniques

UNIT II

Introduction to Data Base Management (DBMS)

Definition and Importance of Database Management, Introduction to Database Management- Real Estate Valuation Perspective, Role of Database Management in Real Estate Valuation, Types & Components of Data Bases, Database Operations, Types of Data Required: Physical, Legal, Financial and Market Data, Data Collection on-site and off-site , Data Verification & Validation, Tools & Technology for Data Collection, Challenges in Data Collection, Data Analysis, Reporting & Documentation

UNIT III

Data Classification, Processing & Analysis

Importance of Structured Data for Valuation, Data Lifecycle, Types of Data in Real Estate Valuation. Classification Techniques, Data Processing, Organization, Transformation, Data Analysis, Descriptive Analysis, Comparative/ Benchmark Analysis, Inferential/Predictive Analysis, GIS/Spatial Analysis, Integration with Valuation Approaches, Tools & Software for Data Processing & Analysis, Reporting & Presentation

UNIT IV

Documental Data, Site Data & Market data

Importance, Role, Classification of Data, Verification & Reliability of Data, Documentary Data (Definition, Sources, Relevance & Practical Applications), Site Data (Definition, Components, Methods of Collection & Relevance in Valuation), Market Data (Definition, Components, Methods of collection & Relevance in Valuation), Integration of data Types, Tools & Techniques, Challenges & Verification

UNIT V

Best Business and Professional Practices and Ethics

Pre-Valuation Assignment Best Practices, Interaction with Clients/Stakeholders, Research and Data Collection, Decline the Unacceptable, Conflict of Interest Check, During Valuation Assignment Best Practices, Use of Expert Opinion, their Assistance and disclosures, Site Inspection, Data Management, Professional Judgment, Client Communication, Post-Valuation Assignment Best Practices, Valuation Report, Documentation, Use of Technology, Ethical Considerations, Continuous Learning

Text Books

1. Research Methodology, C.R. Kothari, New Age International. *(ISBN: 978-8122415223)*
2. Data Science for Business, Foster Provost, O'Reilly. *(ISBN: 978-1449361327)*

Reference Books

1. Research Methodology: Methods and Techniques, C.R. Kothari, New Age International. *(ISBN: 978-8122415223)*
2. Ethics in Engineering, Mike W. Martin, Roland Schinzinger, McGraw Hill. *(ISBN: 978-0073380469)*

Web Links

1. https://ibbi.gov.in