

School of Planning and Architecture, Bhopal

(An Institute of National Importance, Ministry of Education, Government of India)

PhD Admissions 2025

Syllabus for General Aptitude

Verbal Reasoning

- The verbal reasoning section assesses your ability to analyze and evaluate written material and synthesize information and draw conclusions from it.
- This section comprises of:
 - Reading Comprehension: Understanding and analyzing written passages and answering questions based on them.
 - Text Completion: Filling in the blanks with the appropriate word from the given options.
 - Sentence Equivalence: Choosing two correct answers out of the given options for a given sentence.

Quantitative Reasoning

- The quantitative reasoning section measures your ability to understand, interpret and analyze quantitative information.
- This section includes:
 - Arithmetic: Integer properties, factorization, and operations.
 - Algebra: Factoring, simplifying algebraic expressions, and solving linear and quadratic equations, Graphical interpretation.
 - Geometry: Lines, angles, triangles, circles, and polygons.
 - Data Analysis: Descriptive statistics, probability, and distributions.

Analytical Writing

- The analytical writing section requires you to articulate complex ideas clearly and effectively, and to support your ideas with relevant and compelling examples.
- This section includes:
 - Issue task: Presenting your views on a topic and supporting it with reasons and examples.
 - Argument task: Analyzing an argument and pointing out its strengths and weaknesses.

Research Aptitude

- Research: Meaning, Types, and Characteristics, Positivism and Post-positivistic approach to research.
- Methods of Research: Experimental, Descriptive, Historical, Qualitative, and Quantitative methods.
- Steps of Research: Identification of Research Problem, Review of Literature, Formulation of Hypothesis, Research Design, Sample Design, Data Collection, Data Analysis, and Research Report Writing.
- Thesis and Article Writing: Format and styles of referencing.
- Application of ICT in research: E-governance, E-commerce, and E-learning.
- Research Ethics: Publication Ethics, Copyright, and Intellectual Property Rights, Plagiarism, and Research Misconduct.
- Research and Statistics: Measures of Central Tendency, Dispersion, Probability, and Sampling.
- Emerging Trends in Research.

Logical reasoning

- Key concepts and topics that may be covered in logical reasoning:
- Critical thinking: Ability to analyze and evaluate arguments and evidence
- Verbal and non-verbal reasoning: Ability to understand and analyze patterns and relationships between words, shapes, and symbols
- Decision-making skills: ability to make informed decisions based on available information and logical reasoning
- Propositional logic and predicate logic: Ability to evaluate and manipulate complex logical statements using symbolic notation.
- Topology and geometry: ability to analyze properties of geometric shapes and spaces using concepts such as continuity, connectedness, and convergence.

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Brief Syllabus for Departmental Descriptive Examination

Architecture -Advanced skills and knowledge in architecture, architectural research, design theory, accessible and inclusive built-environment, architecture graphics and design, sustainable architecture (inclusive of building science and climate responsive architecture), urban design and heritage conservation, history and contemporary architecture, building services, building materials, building construction and structural systems, estimation and costing, professional practice, housing and town planning, landscape architecture, vernacular architecture and research methodology. Link to syllabus: <https://spabhopal.ac.in/Syllabus.aspx>

Conservation - Broader understanding of subjects from the syllabus of architecture and conservation: history of conservation, traditional building materials, cultural landscapes, indigenous knowledge systems and awareness of organization involved in the protection and management of heritage including UNESCO in India.

Link to PG syllabus: https://www.spab.ac.in/SYLLABUS/PG/new/Syllabus_MCO.pdf

Design - Holistic design thinking and methods in the context of the social constructs and technological innovations. Knowledge of geometry and form generation, design vocabulary, understanding of visual communication and the methodologies in product design. Knowledge of history of design and art and psychological principles (gestalt principles etc.) employed in design. Understanding of visual grammar, design research methods, user experience research, communication and cognition theory and visual semantics.

Link to PG syllabus:

https://www.spab.ac.in/SYLLABUS/PG/MDES/M.DesSyllabus_SPABhopal060919.pdf

Environmental Planning - Environmental responsive behavior, nature-based solutions for resilience and adaptation of socio-ecological systems, maintaining air quality in cities, circular economy in waste management, restoration and rejuvenation of water bodies, water resources and wastewater management, assessment of environmental impacts, environmental resilience and adaptation, disaster management, environment, society and governance, climate change and sustainable development goals, natural resources management, energy planning and management in spatial context, sustainable development of hilly regions

Link to PG syllabus:

<https://drive.google.com/file/d/1JrOc3Hmfg3g4QyU7CxI1fFZsutEDG3oM/view>

Landscape - Basic knowledge of mapping techniques, available Literature related to area of interest in landscape architecture, theories in landscape architecture, Research methods, future research domains, general knowledge on observational techniques.

Link to syllabus: https://www.spab.ac.in/SYLLABUS/PG/MLA_Syllabus23102020.pdf

Transport Planning - Principles and application of: urban and public transport planning including four stage modeling and network planning, traffic engineering including traffic flow theory, road safety and geometric design; logistics and freight management including mode-commodity-city specific demand supply chain management; transport economics, transport policy and institutional framework; urban street design and planning for freight & passenger terminals; intelligent transport systems and its application in passenger and freight management systems; project planning and investment appraisal; mobility innovations and research approaches. Link to PG syllabus:

<https://www.spab.ac.in/SYLLABUS/PG/TPLMSyllabus10122021.pdf>

Urban and Regional Planning- Concepts, principles and techniques related to urban and regional planning disciplines taught at the Masters level. Knowledge of international and national planning frameworks, policies and programmes is desirable. Knowledge of legislations and regulatory frameworks, technology and current initiatives related to urban and regional planning and development, in the Indian context is required. The test on domain knowledge evaluates the application of domain knowledge and skills by the applicant. Interpretation of data and texts, application of analytical concepts and critical thinking with respect to the Urban and Regional Planning discipline or its specialized domains are to be judged through the test.

Link to PG syllabus :

https://www.spab.ac.in/SYLLABUS/PG/MPlanURP_Syllabus10122020.pdf

Urban Design - Developing a critical and holistic approach to research in the diverse emerging contexts of urban forms through a wide range of disciplines and professions. Urban processes in the contemporary city making through multilayered inquiries and innovative research methods. The contexts of research range from indigenous urban forms to climate change, and sustainability. Research opportunities in urban design department spans broadly in five broad interdisciplinary themes: (i) urban history (ii) city dynamics and urban structure (iii) environmental/ ecological issues and resiliency in cities (iv) housing, neighborhoods, social interactive spaces and (v) community development; mobility and urban forms, art, culture that shape cities. Link to PG syllabus:

https://www.spab.ac.in/ud/New%20Syllabus_UD_SPAB.pdf

Building Engineering & Management- Fundamental understanding of the principles of Architecture, Engineering, and Project Management at the postgraduate level, emphasizing advanced critical thinking in relation to contemporary construction methodologies. Candidates must articulate their knowledge through coherent, structured, and scholarly writing. Key focus areas of assessment include the strategic understanding of Project Management, Design Management, Construction Technology, Building Services, Building Materials, Sustainability Imperatives, Resilient Building Strategies, and innovative approaches to project implementation. Link to PG syllabus:

https://www.spab.ac.in/SYLLABUS/PG/MBEM/MBEM_Syllabus25.pdf