



योजना तथा वास्तुकला विद्यालय, विजयवाड़ा
School of Planning and Architecture, Vijayawada
An Institute of National Importance, Ministry of Education, Govt. of India

DEPARTMENT OF PLANNING

ODD SEMESTER A.Y. 2026-2027

Studio Brief: Graphics Studio (PLN111)

Programme & Sem:	Bachelor of Planning, I Year I Semester
Category:	Studio Core
Duration:	August to December 2026
Number of Credits:	15
Total Marks:	100 (Internal assessment – 50 marks; External jury – 50 marks)
Studio Coordinators:	Dr. Jayeshkumar Maheshkumar Bhagwat, Asst. Prof., Dept. of Planning Mr N Pradeep Kumar, Asst. Prof., Dept. of Planning

Introduction to the Studio

The Graphics Studio is a primary introductory course in the first-year Bachelor of Planning (B. Plan) curriculum which serves as a foundational cornerstone for visual literacy, technical precision, and spatial representation in the Bachelor of Planning (B. Plan) programme. Apart from being adept at spatial understanding, planners must translate multi-dimensional, complex urban dynamics into precise, legible, and authoritative graphic documents. This studio systematically builds the core physical drafting, visualization, and representation competencies required to make those translations authoritative and actionable.

Studio Aim and Objectives

The aim of this studio is to inculcate a thorough knowledge of basic technical drawing skills, advanced visualization, and diverse presentation and representation techniques. Through systematic exercises, the studio hopes to transition students from casual observers of the built environment into analytical planning professionals who can think and speak spatially.

The primary objectives of the studio are:

- To inculcate fundamental knowledge of basic technical drawing skills, precise visualization, and advanced graphic presentation techniques
- To master the usage of professional drawing equipment, standard sheet layouts, paper media handling, and sheet folding protocols
- To bridge the gap between abstract geometric projections and real-world spatial environments through empirical observation and measured drawing
- To transition students from controlled classroom drafting to experiential field-based documentation, mapping, and physical model building

Structure of the Studio and Focus Areas

The curriculum is structurally divided into five progressive units, taking students from elementary line control to more complex documentation:

Unit I: Drawing Materials and Equipment

- **Drafting Mechanics:** Master the physical application and control of professional drawing equipment, including drawing boards, T-squares, set squares, parallel squares, pro-circles, and French curves.
- **Media and Materiality:** Exploration of varied paper sizes, paper types, and cardboards, alongside standard sheet layout generation and official sheet folding protocols.
- **Rendering Mediums:** Introduction to the behaviour, mechanics, and properties of varying pencil grades, drawing pens, brushes, watercolours, crayons, and colour pencils.
- **Visual Communication Theory:** Understanding the critical importance of graphics and visual representations across both manual and digital paradigms, establishing why clear graphic assets dictate planning legibility.

Unit II: Fundamental Elements of Drawing

- **Composition and Geometry:** Application of the principles of graphic composition using foundational elements—points, lines, and regular polygons.
- **Line Weight Hierarchies:** Technical mastery over varying line types, line thicknesses, line styles, and line intensities to express depth and spatial boundaries in drawings and maps.
- **Cartographic Standards:** Training in standardized dimensioning, lettering, drawing formats, standard urban symbols, legends, and statutory color-coding.
- **Colour Mechanics:** Practical application of the colour wheel, navigating types and mixing of colours, tints, tones, and shades to represent varying urban scales and land uses.
- **Urban Entourage:** The scalable representation of human figures, trees, hedges, and vehicles in both plan and profile view to establish a sense of scale and proportion.

Unit III: Geometric Shapes and Forms

- **Spatial Vocabulary:** Exploring complex geometric patterns, shapes, and forms and understanding the concept of positive and negative spaces.
- **Planar and Solid Geometry:** Introduction to the principles of planar geometry, evaluating simple and complex solids, and drafting exact sections of solids.
- **Morphological Sketching:** Freehand and structured sketching of geometric built forms, training students to isolate complex urban massing into basic volumetric shapes.

Unit IV: 3D Views and Projections

- **Geometric Projections:** Translating three-dimensional objects into two-dimensional drawings through orthographic projections, isometric views, axonometric projections, and oblique views.
- **Spatial Perspective:** Using one-point, two-point, and three-point perspective drawings to draft objects, individual buildings, and/or continuous streetscapes.

Unit V: Scale and Measured Drawing

- Scalar Metrics: Translating real-world dimensions to paper using numeric and graphic scales.
- Measured Drawing – Building: Hands-on physical measurement and documentation of a building through site plans, floor plans, elevations, and sections
- Plan Preparation – Streetscape: Understanding a streetscape through documentation, drawings and plan preparation

Studio Work Plan

The Studio work-plan is as follows:

Week (Duration)	Studio Work / Tasks
Weeks 1-2 (2 weeks)	Drafting and drawing fundamentals – Introduce manual drawing equipment, paper sizes, sheet layouts, line types, thicknesses, and lettering, explore colour theory and presentation techniques, practice basic representation of human figures, trees, hedges, and vehicles
Week 3 (1 week)	Geometry & Field Exploration – Study geometric patterns, positive/negative spaces, and sections of simple/complex solids
Week 4 (1 week)	Micro-exercise – understanding basics of fieldwork, urban sketching, map Preparation
Weeks 5 (1 weeks)	Field work – street mapping (neighbourhood level)
Weeks 6-8 (2 weeks)	Sketching of the street views, prepare location maps, base maps, and a physical model based on the data collected during the field visit
Weeks 9-10 (2 weeks)	Projections & Perspective Drawing – learn and draft orthographic, isometric, axonometric, and oblique projections of geometric shapes, Master one-point, two-point, and three-point perspective views, draft perspective views of objects, buildings, and/or streets
Weeks 11 – 12 (2 weeks)	Measured drawing – understand numeric/ graphic scales and proportions to take measured drawings of a residential unit, prepare a comprehensive site plan indicating building footprints, open spaces, and adjacent land-use, draft floor plans, elevations, and sections of the residential building.

Field Work – Street Mapping (Neighbourhood Level)

As part of the Studio, a neighbourhood-level street mapping exercise is proposed. This exercise would help in transitioning students from controlled, abstract classroom drafting to empirical urban observation. It would challenge students to apply technical skills acquired earlier in the Studio to the fluid, multi-dimensional reality of the built environment. The primary goal of this fieldwork would be to encourage the student to decode the physical and functional characteristics that give an urban area its distinct spatial identity.

As part of the exercise, the class would be divided into groups of around 4 students. Each group would be assigned a specific street to study, including spatial observation and sketching, basic analytical mapping, and comprehension of scale and proportion. The tentative dimensions of study include morphological and physical characteristics, functional and land-use activities, and temporal and movement rhythms. Street length will not exceed one kilometre.

Case Study Area – Vijayawada

Vijayawada is proposed as the preferred city for conducting fieldwork since it offers a variety of urban fabrics for the students to explore and understand while retaining scope for repetitive visits, if necessary. The tentative stretches within Vijayawada for the exercise are:

1. Besant Road (From Eluru Road Junction to Prakasam Road Junction) *[approx. 650 m length]*
 - Commercial stretch – pedestrian-heavy, zero setbacks, highly active building facades, a chaotic mix of informal street vendors interacting with formal retail frontage, and multi-level vertical commercialization
2. Kaleswara Rao (KR) Market Road / Islampet Main Road (From Nehru Bazar to Tarapet Road) *[approx. 750 m length]*
 - Mixed-Use stretch in the Old City (One Town) – organic evolution, shared common-wall system in buildings, very tight rights-of-way (ROW), and true ground-floor mixed-use
3. M.G. Road / Bandar Road (From Benz Circle to Labbipet All India Radio Station) *[approx. 900 m length]*
 - High-End Mixed-Use stretch in the New City – large plot sizes, modern glass facades, defined building setbacks, and multi-lane vehicular corridors with active service lines, hosting high-end retail malls, showrooms, and luxury corporate spaces
4. Siddhartha College Road / Polyclinic Road (From Tickle Road Junction to Siddhartha Academy Gate) *[approx. 800 m length]*
 - Institutional and organised residential stretch – tree-canopied street featuring well-defined boundary walls, structured footpaths, large institutional clearings, and low-to-mid-rise residential apartments
5. Canal Road / Arjuna Street (From Prakasam Barrage entry towards Kanaka Durga Temple Footsteps / Brahmin Street) *[approx. 700 m length]*
 - Stretch in the religious and pilgrim fabric – heavily modified by transit-oriented religious infrastructure, temporal crowds (pilgrim footfalls), small religious kiosks, dharamshalas, and traditional vernacular housing styles
6. Krishna Lanka Main Road / Karakatta Road (linear strip adjacent to the Krishna Riverbank) *[approx. 900 m length]*
 - Stretch at the city's interface with Krishna River – shifting from highly dense, low-income incremental riverine settlements to a heavily engineered retaining bund/embankment wall
7. Ryves Canal Road / Eluru Canal Bund Road (From Chuttugunta Junction to Satyanarayanapuram Bridge) *[approx. 850 m length]*
 - Stretch runs linearly along a colonial gravity canal network – edge conditions vary rapidly from small-scale auto-workshops to linear informal housing

8. Auto Nagar 100 Feet Road / 3rd Cross Road (From Auto Nagar Gate Signal inward) [*approx. 950 m length*]
 - Planned industrial fabric stretch – large loading bays, grease-heavy open yards, heavy-vehicle movement, steel fabricators, and specialized institutional utility layouts

Workshop

As part of the Studio, a one-day workshop is proposed. Depending on the progression of the Studio and availability of experts, any one of the following themes maybe taken up for the same.

Option 1 – Measured Drawing

Before students can accurately document a building footprint or a street layout, they must understand physical scale relative to their own bodies. This workshop trains students to use their bodies as direct spatial measuring instruments and introduces standard surveying equipment.

Option 2 – Urban Sketching

This workshop focuses on training the hand-eye coordination required for live sketching. Students will master rapid perspectival framing, horizontal line estimation, visual scaling, and quick pencil or ink texturing. This enables them to capture real-time spatial proportions, architectural enclosures, and street activity efficiently on site.

Option 3 – Design for Urban Planners

Planners look at streets differently than architects; they must communicate how a street *functions* socially, economically, and structurally as an urban design envelope. This workshop teaches students how to combine raw technical drawings (plans/sections) with analytical visual overlays to communicate urban design issues like pedestrian-vehicular conflict, spatial enclosure, and facade transparency.

Option 4 – Graphics for Communication with the Public

Professional planners rarely present dense technical drawings to the public; communities require intuitive, non-jargon visual tools to voice their spatial needs. This workshop teaches students how to demystify technical planning graphics and co-create visual, hand-drawn spatial maps with citizens during a public participatory or public hearing scenario.
