RECOMMENDATIONS FOR AN IMPROVED MASTER’S LEVEL URBAN PLANNING CURRICULUM
TITLE
Recommendations For An Improved Master’s Level Urban Planning Curriculum

PUBLISHER
National Institute of Urban Affairs, Delhi

YEAR OF PUBLISHING
2017

DISCLAIMER
While effort has been made to ensure the correctness of data/information used in this report, neither the authors nor NIUA accept any legal liability for the accuracy or inferences every drawn from the material contained therein or for any consequences arising from the use of this material. No part of this report may be reproduced in any form (electronic or mechanical) without prior permission from or intimation to NIUA.

THE FULL REPORT SHOULD BE REFERENCED AS FOLLOWS
NIUA (2017) "Recommendations for an Improved Master’s Level Urban Planning Curriculum" Delhi, India.
Text from this report can be quoted provided the source is acknowledged.
RECOMMENDATIONS FOR AN IMPROVED MASTER’S LEVEL URBAN PLANNING CURRICULUM
Acknowledgements

This research has been possible with the cooperation, intervention, guidance and support of a number of individuals who deserve acknowledgement.

Firstly, I would like to thank the Asian Development Bank (ADB) for supporting the study under the South Asia Urban Knowledge Hub project. I thank Ms. Vivian Castro-Woolridge, Mr. Keiichi Tamaki, Mr. Ashok Srivastava and Mr. Ron Slangen and Mr. Mynguan Fan from ADB for their continued engagement and suggestions. A special thanks to Ms. Michelle Laurie, Knowledge Management Specialist, for providing constructive comments at every stage of the work and motivating us to complete the work on time.

I would like to thank the Heads of the Planning Schools who I have constantly interacted with during the course of my research and the urban planning faculty in the respective departments. I acknowledge the inputs received from the larger planning fraternity (academicians, practitioners and students) whom I have engaged with, during the course of this research.

The research has benefitted from the constant advice and mentoring from Dr. Ashok Kumar, Professor in the School of Planning and Architecture, Delhi, who himself has done extensive research on planning education. I also acknowledge the contribution of my colleague at NIUA, Dr. Ajith Kaliyath, a member of the K-Hub team whose interest in this subject has helped provide inputs and positive feedback at every stage.

I am grateful to our Director, Prof. Jagan Shah for his constant support and encouraging feedback and for providing direction and leadership in the project activities.

Thanks are also due to Ms. Swati Patel, Research Associate, who has helped me in the final months leading to completion of the research and Mr. Deep Pahwa from the design team at NIUA who has provided design support for making this outcome print ready.

Finally, I am grateful to all who have directly or indirectly contributed to make this study possible. I acknowledge their assistance even if their names may not be individually mentioned here.

Dr. Debjani Ghosh
Team Leader (KHub)
List of Figures

Figure 1  Locations of Selected National Planning Schools in India  11
Figure 2  Challenges Faced by Indian Cities in Order of their Significance  16
Figure 3  Streams Which Can Produce Skilled Planner in Order of their Significance  17

List of Tables

Table 1  Select Government Planning Schools in India  11
Table 2a  Comparative Curricula Content Analysis of International Planning Schools  14
Table 2b  Comparative Curricula Content Analysis of National Planning Schools  15
Table 3  Challenges as Addressed by Indian Planning Schools  18
Table 4  Soft Skills Considered Relevant for Planning Education by Planning Schools  18
Table 5  Proposed Parameters for Curricula Analysis and Justification for their Selection  19
Table 6  Course Content and Its Relevance to Urban Agenda  22
# Contents

EXECUTIVE SUMMARY ....................................................................................................................07

BACKGROUND AND CONTEXT ........................................................................................................09
WHY A RE-LOOK AT THE URBAN PLANNING CURRICULA? ......................................................09

INTRODUCTION .......................................................................................................................................11
A BRIEF HISTORY OF PLANNING EDUCATION IN INDIA .........................................................12

RESEARCH METHODOLOGY ...........................................................................................................12
CONTENT ANALYSIS OF URBAN PLANNING CURRICULA ............................................................13
THE FUTURE OF PLANNING EDUCATION — RECOMMENDATIONS FOR A REVISED CURRICULA ..........................................................22

CONCLUDING REMARKS ...................................................................................................................24

REFERENCES ...........................................................................................................................................26

ANNEXURE 1 ...........................................................................................................................................28
ANNEXURE 2 ...........................................................................................................................................30
ANNEXURE 3 ...........................................................................................................................................34
EXECUTIVE SUMMARY

Urban India is currently witnessing an unprecedented movement of people and materials between various geographic locations, which provides a unique opportunity to systematically plan such activity in an organized manner in order to achieve sustainable prosperity. The new urban sector missions such as the Smart Cities Mission aim to harness these intellectual and material resources for shaping Indian cities as advanced forms of planned settlements. Urban planning being a specialised field with responsibility to address the spatial dynamics of a city or region, the skills and tools available to planners to address urban transformation are being reviewed by various stakeholders.

This report is divided into eight parts. The first and second parts covers the background and context, highlighting the need for the study. These are followed by a brief history of planning education and how the focus has changed over the years. Methodology explains the process of research followed by analysis, which includes literature survey, content analysis and Organisational Hierarchy Survey (OHA) through a questionnaire. The Recommendations come last, based on the analysis along with concluding remarks.

The analysis was done in three sections: exhaustive literature review, primary survey (OHA) and content analysis. The assessment progressed through a review of literature from journals, articles and books from various countries on their views about the role of the planning profession in addressing the urban agenda and the strategic advantages of responding to this opportunity. Most of the available literature suggested the response from planning schools was slow. Prominent leaders in the field have called upon the wider academic community to see this as an opportunity to develop a range of core competencies as the world is becoming increasingly vulnerable to unprecedented urban challenges.

The assessment involved reviewing curricula from the three leading planning schools of India and that of IIT Kharagpur. In addition to this, an OHA was done through a questionnaire posed to the heads of the planning schools whose views on various aspects of the urban agenda and on curricula re-structuring were taken. For content analysis, a set of parameters was shortlisted from the literature review, against which each of the planning schools’ syllabi was reviewed and gaps identified.

The analysis brought to the fore a few key issues, which need to be kept in mind while framing recommendations:

- Need for Skill Development
- Need for Institutional Flexibility
- Ability to Re-structure based on feedback
- Commitment to bring in reforms in planning education to match market demand

Given the current scenario, it is observed that a mismatch between the present planning agenda in the country and the kind of education being given to future planners in the schools has given rise to the need for a re-thinking on the curriculum. Thus, it is of utmost importance that planning education should seek to undo the isolation of planners from the mainstream of institutions and organisations engaged in the formulation and implementation of policies, programmes and projects for urban development. Today, town planners not only need to be educated about development plan making, public policy framing, and enforcement of development control norms, but they should also acquire skills for effective communication, negotiation and mediation with competing priorities through creative solutions, and the diverse perspectives of stakeholders and the political leadership. The planning schools will therefore be required to reorient their education programmes to address the new challenges and issues that will arise with the new orientations toward urban development management and governance.
BACKGROUND AND CONTEXT

The Asian Development Bank (ADB) supported South Asia Urban Knowledge Hub (the K-Hub) aims to increase the influence of evidence-based advocacy for urban policy and practice in South Asia. The K-Hub has worked towards developing a forum for improving knowledge management within and between countries and regions, wherein its activities have facilitated sharing of best practices in urban management, infrastructure and service delivery and developing capacity for outcome-oriented research in the urban sector.

The main objective of the K-Hub is to build capacity to generate and apply knowledge to city management according to principles of sustainable development and to influence policy and decision-makers to steer in this direction. The K-Hub has thus facilitated information and experience exchanges within South Asia for city managers, utility staff, policy makers, academia and the private sector to improve the urban environment and service delivery. In this context, the K-Hub recommends strengthening of curricula to prepare planners and urban managers for 21st-century challenges in South Asia, strengthening the capacity of national centers for outcome-oriented research and influencing intended audiences.

NIUA’s main objective, as one of the national centres, was to enable Government of India’s multi-pronged urban strategy through evidence-based planning and policymaking, by providing credible research outputs, advocacy and facilitating implementation. One such deliverable to enable this, as mentioned above, is to promote recommendations for an improved Masters in Urban Planning programme in the light of the new urban mandate of the government.

Large urban centres are fast becoming multi-ethnic and multi-linguistic zones of settlement assimilating a cosmopolitan character due to inherent impact of globalisation. Urban settlements also act as a service centre for large-scale human activities catering to the needs of their hinterlands. Hence, the issues pertaining to urban settlements are diverse and demand a holistic and pluralistic (unpublished APSA conference paper, Roy AK, Ghosh D and Kaliyath A, 2015). To understand the diverse issues of modern cities, especially in the developing world, there is need for a multi-disciplinary approach and perspective to widen the horizon of planning education. The urban agenda of the world has been changing with time from the provision of infrastructure and basic services to the wider environment, to urban growth, to sustainable urban development, and thence to liveable, smart and intelligent cities. (Wheeler et. al. 2010).

WHY A RE-LOOK AT THE URBAN PLANNING CURRICULA?

Government of India’s response to address the needs of urban India through 11 Missions has contributed to an unprecedented vigour in the upgrading and management of Indian cities. All these together have resulted in what can be called a “Planning Policy Swell” (Kumar, 2017) as large investments are now being planned; reforms are being undertaken; and citizen engagement is being brought to the core of urban agenda.

However, there exists a gap between planning agendas and planning education both in space and time, which has compelled the existing system of planning education and its related pedagogy to change and adapt to new approaches. Along with the changing issues of urban areas, the definitions of urban planning have changed over time and are not the same across the globe. The new approaches identify an institutional shift from governmental control to good governance, facilitating a wider scope for planning through public participation and effective implementation of the plans (UN-Habitat, 2009).

Thus far, comprehensive planning has been prescriptive seeking to design an ideal end-state for urban development, rather than interventional. The system of planning followed is methodological, in terms of framing goals and objectives, surveys, identification of issues and formulation of strategies. The same is the case in all South Asian planning education systems, which are only half a century old since the first planning school started in India (Ansari, 2009).

The need to see a change in the urban planning curricula is primarily due to the challenges being faced by existing planning practices, many of which cannot be satisfactorily resolved due to the limited professional capacities of city planners. Diverse urban issues need to be dealt with in a dynamic urban landscape, which were not a priority earlier. There is a growing discussion among the planning fraternity of the evolving urban agenda in the country and the importance of effective urban planning. This is also resulting in challenges faced by the planning institutions to train planners and provide them with skills relevant to tackle current city problems (sanitation and environmental issues being pertinent examples).

Planning education courses in selected schools in India have diversified to some extent to cope up with the changing socio-cultural and political economy in contemporary India. However, a careful observation reveals that there is still major emphasis on spatial or physical analysis in the course content. One glaring lacuna in the existing urban planning process
in India is the almost total absence of any participatory mechanism, which has been primarily responsible for the wide gap between what planning educators teach and what people and practitioners of planning expect from planning education. In almost all planning schools in the country, the orientation and content of their programmes have been shaped by the planning ideologies that were essentially British in origin.

However, the model course curriculum of the All India Council for Technical Education (AICTE) for a Master’s Programme (brought out in an effort to standardise the curriculum of post-graduate planning offered in the planning schools) has also been followed by the government run institutes, since it was put in place in 2011. In spite of this, diversification of planning courses (number of specialisations in the Masters of Planning programme) has been observed in some of them.

The urban mandate in the last two decades has seen a renewed focus on evidence based planning for all the mission mode programmes which are mandated to deliver clean, smartly governed cities with better transport and infrastructure services. Hence qualified and skilled planners will be in demand for plan preparation and implementation of projects arising out of such programmes, and this need is to be met by the planning schools.

In the light of this, the Ministry of Human Resource Development, Government of India had set up a Committee of Experts in Town Planning and Architecture to frame ‘Policy Guidelines to Strengthen Architecture and Town Planning Education’. The committee report, submitted in July, 2011, among other recommendations, highlighted the fact that a multipronged strategy needs to be adopted to bridge the growing gap between supply and demand of trained professionals in planning. It broadly identified three areas for policy consideration in light of the need for practical training, of which skill upgradation is one. (Ministry of Human Resource Development, 2011).

In deliberating on what should be the focus areas for a multi-disciplinary urban planning curriculum, certain considerations need to be kept in mind:

- Curricula should meet the skill requirements of a planner in the open market.
- Content should have a good mix of theory and practice including the latest technological innovations in the field.
- Government’s agenda needs to be included in the content
- Focus should also be given to the latest concepts of sustainable development, inclusive planning and development.
- The gap between current needs and knowledge of the faculty in the field of planning, management, and development skills needs to be identified.

Given the fact that India has entered a high-growth phase of urbanisation and the skills market is growing, this suggests the need for a meticulous review of the impact of the planning profession on public policies in the country. It calls on the key stakeholders in the Indian planning profession and education to take the lead in responding to the opportunities heralded by the Planning Revolution.

Having set the need of the study, the details of the report sections are given. The Background and Context in this paper establishes how the study came about and in what context this study is being done. The section on ‘Why a Re-look’ establishes the need for the study – why planning education needs to undergo re-structuring in order to be able to prepare future planners to respond to the urban transformation. The Introduction explains the study, the planning schools studied and how planning education and a planner’s role has been seen over the decades. The History of Planning Education briefly touches on the evolution of planning education, how its approach has changed with the government’s thrust on growth and urban development and how much or little the curricula in the planning schools’ have kept up with the pace. This section also highlights the demand for planners and based on the current urban mandate what more is required both in terms of number and content.

Research Methodology explains the process this research has followed mainly in three sections: an extensive literature survey on planning education, content analysis based on parameters shortlisted through the literature survey, and an organizational hierarchy survey with faculty of the selected planning schools. The Recommendations have been framed based on the gaps identified through the content analysis. The section tries to provide certain inputs, which will help in improving the urban planning curricula and making it more effective.

These recommendations for an improved urban planning curriculum are directed to the Government of India, All India Council for Technical Education (AICTE) which is the regulatory body for the planning schools, to the planning schools themselves, the Institute of Town Planners, India (ITPI) with whom planners have to be registered to practise their profession and to the relevant Industry which will benefit from more competent planning professionals.
INTRODUCTION

The study has considered the Masters in Urban Planning programme in three national planning schools - Delhi, Bhopal (Madhya Pradesh) and Vijaywada (Telengana) and the Indian Institute of Technology (IIT) Kharagpur (West Bengal), one of the oldest such institutes in the country (see Fig. 1 and Table 1 for further details).

Planning education in India started with the colonial influence of regulatory provisioning of civic administration under the town and country planning framework; however, there has been a major diversification in specialisation within planning courses incorporating the multiple-dimensions of urbanisation. While there exists a model curriculum, public funded schools of planning have been innovative in addressing the contemporary needs of planning education tools compared to those run by private institutions (unpublished APSA conference paper, Roy AK, Ghosh D and Kaliyath A, 2015). To understand the diverse issues of modern cities especially in the developing world, there is a need for a multi-disciplinary approach and perspective to widen the subject horizon of planning education. It is observed that the outreach of planning education is low in India given the vastness and demand for planning professionals in the country which is under rapid and higher economic growth and urbanisation.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the School</th>
<th>Year of Establishment</th>
<th>Subjects Offered and Number</th>
<th>Levels Offered</th>
<th>Affiliations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SPA New Delhi</td>
<td>1955</td>
<td>5 (UR, RP, TR, HSG, EP)</td>
<td>PhD, MP, BP</td>
<td>Autonomous Institute, MHRD, Govt. of India</td>
</tr>
<tr>
<td>2</td>
<td>IIT Kharagpur</td>
<td>1956</td>
<td>2 (CR, RP)</td>
<td>PhD, MP</td>
<td>Autonomous Institute, MHRD, Govt. of India</td>
</tr>
<tr>
<td>3</td>
<td>SPA Bhopal</td>
<td>2008</td>
<td>2 (TUP, UD)</td>
<td>PhD, MP, BP</td>
<td>Autonomous Institute, MHRD, Govt. of India</td>
</tr>
<tr>
<td>4</td>
<td>SPA Vijayawada</td>
<td>2008</td>
<td>2 (URP, EPM)</td>
<td>PhD, BP, MP</td>
<td>Autonomous Institute, MHRD, Govt. of India</td>
</tr>
</tbody>
</table>

UP- Urban Planning; RP- Regional Planning; TP-Transport Planning; HSG- Housing; EP- Environment Planning; URP- Urban and Regional Planning; CP- City Planning; MP- Master of Planning; BP- Bachelor of Planning.  
Source: Compiled by Authors, 2016
A planner interacts with several stakeholders who influence the course of urban development, from bureaucrats to, public and private planning agencies, from private developers to, industrial development agencies, state and city level officials, from research institutes to civil society and citizens. The planner in such a multi-sectoral and interdisciplinary system takes on varied roles from the ‘Strategic Planner’ to ‘Technical Professional Planner’, ‘Project Planner’ to ‘Urban Manager’ and ‘Advocacy Planner’ representing the interests of the weakest in society. The core teaching in planning education in India is still mainly oriented towards theoretical knowledge of a wide range of subjects. There is need to re-examine the skills dimension of planning education, especially with the large anticipated demand for public planners who will be dealing with practical planning tasks within urban local bodies (ULBs).

A BRIEF HISTORY OF PLANNING EDUCATION IN INDIA

The urban and regional planning education started in India in the early years of independence, drenched in colonial influences of comprehensive rational planning regimes (Kumar et al, 2018 Forthcoming). The first educational programme was started with the formation of the School of Planning and Architecture (SPA), New Delhi in 1955. This was followed by another Masters level programme by the Indian Institute of Technology, Kharagpur, West Bengal in 1956. Currently, there are close to 30 planning schools in India operating under public and private ownership (Kumar et al, 2016). The majority of them are under the public sector, which are directly governed either by the Ministry of Human Resources Development (MHRD), Government of India or run under various state government patronage. However, the All Indian Council of Technical Education under MHRD provides accreditation and major curricula guidelines to be followed by all of them.

In the initial years there were very few urban planning schools/institutes that introduced town and country planning courses in India. These were SPA New Delhi, Indian Institute of Technology, Kharagpur and Bengal Engineering Collage, Sibpur. These schools started planning courses immediately after Independence inheriting the colonial legacy of British planning ideologies of diagnostic survey, conservative surgery and integrated planning (Ansari, 2009). Even the establishment of the Institute of Town Planners, India in 1951 was inspired heavily by the Royal Town Planning Institute (RTPI) in UK.

The agenda of the initial decades of national building focused on rural development, specifically employment generation along with poverty alleviation; this led to a poor response from existing planning schools with regard to providing professional inputs in the development process (unpublished APSA conference paper, Roy AK, Ghosh D and Kaliyath A, 2015). It was only in the early 90s with the 74th Constitutional Amendment Act, 1993 giving autonomy to the 3rd tier of government or urban local bodies (ULBs), and subsequently the launch of a national level urban sector programme called Jawaharlal Nehru National Urban Renewable Mission (JNNURM) in 2005 that for the first time urban centres were recognised as engines of growth (National Five Year Plans) in India.

Subsequently, policy reforms were put in place to strengthen the capacity of urban local bodies (ULBs) for ensuring urban infrastructure and access to basic services to citizens. This programme realised the need for urban planners in nation building and there was a massive requirement for capacity building at urban local body level. This led to the establishment of new planning schools in India, mostly by the private sector. During the last 15 years (2000-2015) more than 50 percent of the total institutes established have offered urban planning courses. The government also felt the need for public sector engagement in planning education, which led to two new Schools of planning and architecture being established at Bhopal and Vijayawada respectively, during later part of 2008. The newly established planning schools have realised the changing orientation of planning education in India and have tried to incorporate the development of technological, spatial and managerial skills in their respective curricula through the incorporation of geo-spatial sciences that help in decision-making in urban planning problem solving rationales.

According to a recent estimate by the Institute of Town Planners, India (ITPI), there are only 5000 registered planners, too little a number to deal with the existing demand for planning professionals. It is estimated that we need 1,60,000 planners by 2031 (Committee of Experts in Town Planning and Architecture for Policy on Education, chaired by E F N Riberio, 2011). Thus on an average, India needs 8,000 planners every year over next 20 years. Only a few metropolitan cities have a functioning planning department supported by a metropolitan authority. Even where they exist, they are staffed with only 8 to 10 planners and are usually led by engineers.

RESEARCH METHODOLOGY

The reason for choosing to analyse content of the urban planning syllabi among all other planning courses in the national
planning schools and come up with recommendations for a more effective curricula has emerged from the increased demand for skilled planning professionals vis-à-vis a decreased outreach in planning education in the country. This has given rise to the need for analysing the extent of engagement of Indian planning education with the contemporary urban agenda and arising skill requirements. The vast literature available on planning education has helped to develop a new methodology for content analysis.

The methodology explains the process of research to analyse and understand the content of current course curricula of the selected planning schools in India. The selection of schools is based on the nature of affiliations government run of schools of planning and IIT Kharagpur, which has the oldest department of architecture and planning. There are close to 30 planning schools in India at present and a substantial number are run by private organisations. Among these, there are four traditions or pathways of planning education with focused ideologies reflected into their curricula.

The School of Planning and Architecture (SPA), Delhi focuses on promoting traditional planning practices of physical planning through design and pragmatic planning tools such as master planning and developmental control regulations. To some extent, IITs especially IIT Kharagpur also follow a similar ideology in their respective planning curricula with dominance of architecture and engineering solutions to planning problems. Besides these traditions, there is a prescribed but not mandatory model curriculum by the All Indian Council for Technical Education (AICTE) and Institute of Town Planners, India (ITPI), which provide general guidelines for planning education in India.

The technical methodology follows firstly, a comparison of some of the key aspects of the urban planning programme in the national level schools and some of the leading international schools; secondly, a series of engagements with various stakeholders from different domains; and thirdly, a detailed content analysis with derived indicators from a detailed literature survey of a large number of relevant articles and papers. The process of engagement included an opinion survey (through a detailed questionnaire) which was administered to the faculty heads of the planning schools to take their views on certain aspects which will help frame a more streamlined urban curriculum, equipped to develop the skills of future planners who will address the urban mandate. The feedback from respondents was compiled in matrix form for better comprehension. The common responses were grouped as priority areas while the major differences brought out the gaps among diverse schools of thought. Several rounds of discussion and one-to-one talks engaging with the various groups of the planning fraternity have helped to crystallise thoughts on strategy.

The engagement strategy was aimed at articulating the process (participatory) through which all relevant stakeholders (government, private, academia, corporate, NGOs, and regulatory bodies) have participated.

Content analysis was based on collection of secondary sources of data, mainly the urban planning curricula of the selected planning schools. It assessed the relevance of planning education (in terms of course content) to the contemporary urban agenda in India. The comparison of different syllabi brought their commonalities and differences, strengths and weaknesses. A more effective content of the curriculum was derived by analysing each school’s syllabus against a set of indicators derived from exhaustive scanning of literature on what makes a more effective planning curriculum. The framework for recommendations was drawn up from results from a combination of discussions with stakeholders and detailed content analysis. The scope of the research identified:

- To what extent coverage of current urban policy and practice and other related aspects are incorporated in the planning curricula;
- How is the curricula sequenced through the semesters;
- Whether sufficient ‘hands on’ application of methods and tools are being taught;
- Whether there is sufficient capacity to cater to the demand for trained urban planners and managers required to make cities better governed and sustainable.

**CONTENT ANALYSIS OF URBAN PLANNING CURRICULA**

Content analysis comprised two segments: analysis of feedback received through responses of the planning faculty of the chosen schools and content analysis and gap identification of the planning syllabi of the four chosen schools. With the application of a new methodology of content analysis to the selected postgraduate planning curricula in India, it is seen that the existing curricula only partially addresses concerns of the current urban scenario, which requires a different set of skills and knowledge.
This first section deals with a comparison of the national planning schools with that of the four leading international planning schools, namely, Department of Urban Studies and Planning – Massachusetts Institute of Technology, USA; The Bartlett School of Planning – University College of London; School of Design & Environment – National University of Singapore; and Melbourne School of Design- University of Melbourne, Australia.

A review of the planning course curriculum and framework of two groups – national and international - brings out certain commonalities as well as differences (see Table 2 and 3).

- University College London (UCL) offers a part-time Master’s course for professionals (Diploma in Urban Design & City Planning – 2 to 5 years), there is no such provision in the three international planning schools as well as in Indian planning schools.
- The masters course offered by UCL (M.Sc Urban Design & City Planning) is somewhat unique as compared to other planning schools; it covers city planning as well as urban design.
- UCL offers one year Master’s degree, but all three international planning schools offer a two year Master’s course similar to Indian planning schools.
- The MIT-MCP programme is designed to be complete in four semesters, but students can finish in three semesters if all requirements are met.
- Indian planning schools do not deviate from their sanctioned intake, but this is not the case with international planning schools. International planning schools generally set a benchmark, which they can increase, or decrease depending upon the number of deserving applicants.
- International planning schools have a credit system in place. Apart from SPA-Delhi (which now starts from the 2017-18 session), all three Indian planning schools are currently following a credit system. As per the AICTE model curriculum

TABLE 2A: COMPARATIVE CURRICULAR CONTENT ANALYSIS OF INTERNATIONAL PLANNING SCHOOLS.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Content</th>
<th>UCL</th>
<th>MIT</th>
<th>NUS</th>
<th>University of Melbourne</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Course Duration (in years)</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Annual Intake</td>
<td>No fixed intake [35 (±)]</td>
<td>No fixed intake [55-60 (±)]</td>
<td>No fixed intake (30)</td>
<td>No fixed intake</td>
</tr>
<tr>
<td>4.</td>
<td>Number of Faculty</td>
<td>12</td>
<td>32 core (73 including visiting)</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>5.</td>
<td>Faculty: Student Ratio</td>
<td>1:3</td>
<td>1:4</td>
<td>1:8</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Marking System (Credit/points)</td>
<td>Credit (180)</td>
<td>Credit (150)</td>
<td>Credit (80)</td>
<td>Credit (200)</td>
</tr>
<tr>
<td>7.</td>
<td>Urban Policy &amp; Quantitative Subjects</td>
<td>City Planning (P), Planning Research (Q)</td>
<td>Quantitative Reasoning and Statistical Methods for Planning (Q)</td>
<td>Urban Analysis Workshop (Q), Quantitative Methods for Urban Planning (Q), Planning Process (P), Urban Policy &amp; Real Estate Markets (P), Urban Development and Policy (P), Policies for Infrastructure (P), Urban Transport Policy (P), Public Policy for Sustainability (P)</td>
<td>Analytical Methods (Q), Strategic Plan Making (P), City Without Slums (P), Housing, Markets, Policy and Planning (P)</td>
</tr>
<tr>
<td>8.</td>
<td>Interdisciplinary Electives</td>
<td>✖</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>9.</td>
<td>Inter-Semester Exchange</td>
<td>✖</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>10.</td>
<td>Core Subjects versus Elective</td>
<td>100%: 0%</td>
<td>66.7%: 33.3%</td>
<td>65%: 35%</td>
<td>87.5%: 12.5%</td>
</tr>
<tr>
<td>11.</td>
<td>Part-Time</td>
<td>✗ (2-5 years)</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>12.</td>
<td>Accreditation</td>
<td>Royal Town Planning Institute (RTPI), Royal Institute of Chartered Surveyors (RICS)</td>
<td>American Planning Association</td>
<td>Planning Institute of Australia (PIA)</td>
<td>Planning Institute of Australia (PIA)</td>
</tr>
</tbody>
</table>

Source: Source: Literature Review and Author’s Analysis
120 credits are mandatory for successful completion of the Master’s course, but in IIT Kharagpur only 93 credits are required for successful completion of the course.

- Interdisciplinary electives offered in Indian planning schools are limited to the architecture department, whereas in international planning schools students are free to choose any elective from any other department, for example, economics, sociology, policy, geography, social science, etc. One of the reasons is that in the SPAs there are only two departments, i.e. architecture and planning.

- There is no provision for interdisciplinary electives in UCL and SPA-Delhi.

- Inter semester exchange provides international exposure to planning students which is extremely helpful for their careers. There is provision for inter semester exchange in NUS (Asian Masters of Urbanism programme) and University of Melbourne. As far as Indian planning schools are concerned there is provision for inter semester exchange, only in IIT Kharagpur (DAAD: IIT Master’s Sandwich Scholarships).

- University of Melbourne offers one of its kind ‘MSD Traveling Studios’ (Traveling studios are ‘working laboratories’ for design thought and production where you explore complex, real-life issues and devise solutions, collaborating with students from across MSD and often from other national and international universities).

- In Indian national planning schools more emphasis is laid on core subjects as compared to elective subjects. This is evident from the percentage of core subjects versus elective subjects, which is in the range of 90:10, whereas in international planning schools the percentage of core subjects versus elective subjects is in the range of 65:35.

- The subject of Urban Policy is an integral part of the curriculum in all planning school.

- There is provision for an integrated semester in all SPA’s (common classes for all planning students).

- There is provision for internship in all schools except UCL. Internship is mandatory in SPA-Bhopal, SPA-Vijayawada, and IIT Kharagpur, whereas internship is optional in SPA-Delhi, MIT, NUS, and University of Melbourne.

- Accreditation plays an important role for planning professionals. Apart from the NUS planning course, all planning courses offered by international planning schools are duly accredited by their respective country’s governing planning institutions. Institute of Town Planners, India (ITPI), duly accredits Indian planning courses.

### TABLE 2B: COMPARATIVE CURRICULA CONTENT ANALYSIS OF NATIONAL PLANNING AND INTERNATIONAL SCHOOLS.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Content</th>
<th>SPA-Delhi</th>
<th>SPA-Bhopal</th>
<th>SPA-Vijaywada</th>
<th>IIT-Kharagpur</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Degree Offered</td>
<td>M. Planning with Specialisation in Urban Planning (MUP)</td>
<td>M. Urban and Regional Planning (MURP)</td>
<td>M. Planning (Urban &amp; Regional Planning)</td>
<td>M.City Planning (MCP)</td>
</tr>
<tr>
<td>2.</td>
<td>Course Duration (in years)</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Annual Intake</td>
<td>Fixed intake (31)</td>
<td>Fixed intake (20)</td>
<td>Fixed intake (20)</td>
<td>Fixed intake (42)</td>
</tr>
<tr>
<td>4.</td>
<td>Number of Faculty (Permanent)</td>
<td>5 (Urban Planning Faculty)</td>
<td>15 (Planning Department Faculty)</td>
<td>9 (Planning Department Faculty)</td>
<td>19 (Department Faculty)</td>
</tr>
<tr>
<td>5.</td>
<td>Faculty: Student Ratio</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Marking System (credit/marks/points)</td>
<td>Marks System (4000)</td>
<td>Credit (120)</td>
<td>Credit (120)</td>
<td>Credit (93)</td>
</tr>
<tr>
<td>7.</td>
<td>Urban Policy &amp; Quantitative Subjects</td>
<td>City and Metropolitan Planning (P), Inclusive Planning (P), Housing and Environment Planning (P),</td>
<td>Housing and Environment (P), Public Policy Analysis (P), Regional Planning and Development (P), Urban Redevelopment (P), Demography and Quantitative Methods (Q), Quantitative Methods and Systems Analysis (Q)</td>
<td>Habitat and Environment Planning (P), City and Metropolitan Planning (P), Planning Techniques and Quantitative Methods (Q)</td>
<td>District and Rural Area Planning (P), Housing Policies and Programs (P), Social Aspects of Human Settlements (P), Quantitative Methods in Planning (Q)</td>
</tr>
<tr>
<td>8.</td>
<td>Interdisciplinary Electives</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>9.</td>
<td>Inter-Semester Exchange</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>10.</td>
<td>Core Subjects versus Elective Subjects</td>
<td>95%: 5%</td>
<td>92.5%: 7.5%</td>
<td>95%: 5%</td>
<td>81%: 19%</td>
</tr>
<tr>
<td>11.</td>
<td>Part-Time</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>12.</td>
<td>Accreditation</td>
<td>☒ Institute of Town Planners, India</td>
<td>☒ Institute of Town Planners, India</td>
<td>☒ Institute of Town Planners, India</td>
<td>☒ Institute of Town Planners, India</td>
</tr>
</tbody>
</table>

Source: Literature Review and Author’s Analysis
The second section of content analysis consisted of a set of questions, which were structured around the predominant query as to how aware these institutions were of the contemporary urban agenda and the accompanying skill requirements. These were also aimed at evaluating the preparedness of the schools to tackle the complex and diverse issues of modern cities, especially in emerging economies such as India. Apart from the planning schools studied, IIT Roorkee was also made part of this survey though it is not part of the detailed study. This was done to increase the number of number of responses and capture wider views. The responses received helped collate the thinking and the reality (Annexure 1). We are deliberately not identifying individual schools for analysis of their syllabi.

In all 19 questions were asked and all four Indian planning schools provided responses to all questions. Apart from some of the qualitative responses, responses were analysed empirically to bring out the majority line of thought, which could form a priority while framing the recommendations. The idea in most of these questions was to bring out where the schools collectively agreed and what they endorsed as against where they differed and disagreed.

For example, against the question of what were the most important challenges cities and towns in India faced currently, out of 6 responses from 5 institutes, 4 of them put ‘planned urban development’ as the top challenge, strengthening the case for improved urban planning through more effective education. This was closely followed by mobility and provision of water and sanitation (Figure 2).

When asked if their curricula were prepared to address these challenges being faced in the urban world, most of the institutions replied in the affirmative, though there were also negative responses and one said that their curriculum was partially addressing these needs. When this was compared to the syllabi of the schools, it was seen that the planning theory and practice module came closest to planned urban development while urban transport took care of mobility. All the institutions had incorporated water supply and sanitation services as part of the planning exercise in the studio. On the other hand, issues like gender, diversity and social harmony, human rights and politics were partially or totally absent in the curricula content.

Contributing to public policy (either individually or in a consortium) by engaging with the government’s agenda should form a very important component of a planning school’s mandate. When asked about the kind of engagement they had with the ongoing urban missions, most of the institutes mentioned participation of their faculty as members in the various committees, which were overseeing or monitoring these missions. One planning school reported very active participation of students in the various planning and design competitions announced by cities as part of plan formulation and implementation.

**FIGURE 2: CHALLENGES FACED BY INDIAN CITIES IN ORDER OF THEIR SIGNIFICANCE**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Average ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Urban Development</td>
<td>11.0</td>
</tr>
<tr>
<td>Mobility</td>
<td>10.0</td>
</tr>
<tr>
<td>Governance</td>
<td>9.0</td>
</tr>
<tr>
<td>Environment</td>
<td>8.0</td>
</tr>
<tr>
<td>Citizens’ engagement</td>
<td>7.0</td>
</tr>
<tr>
<td>Gender Equality</td>
<td>6.0</td>
</tr>
<tr>
<td>Innovation and Technology</td>
<td>5.0</td>
</tr>
<tr>
<td>Water &amp; Sanitation</td>
<td>4.0</td>
</tr>
<tr>
<td>Employment</td>
<td>3.0</td>
</tr>
<tr>
<td>Public Spaces</td>
<td>2.0</td>
</tr>
<tr>
<td>Human Rights</td>
<td>1.0</td>
</tr>
<tr>
<td>Diversity &amp; social harmony</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Author’s Analysis
The involvement of all the institutions in the government initiatives like ‘Skill India’ and ‘Start up India’ highlights the position of planning space and the preparedness of the profession to participate in the open skills market. The majority of the schools have some form of design or innovation centre funded by the Ministry of Human Resource Development (MHRD), which helps students learn and enhance their skills through innovative projects.

Community engagement during the planning exercise is present in most schools through the studio exercise as part of academic training but some of them reported consultancy work undertaken in the market in which the scope for community interaction is more.

Rather than being part of prominent international planning discourses, most institutes responded that the faculty had attended conferences held nationally and internationally to promote the same. Some of them mentioned undertaking joint research with international academic networks as well as student exchange programmes.

On the question of whether restructuring of the existing urban planning programme could produce more skilled planners to effectively meet urban challenges, most of the faculty agreed that though there is periodic provision of updation of curricula, there is a need for deliberations, changes and innovations in pedagogical approach and analytical tools and development of soft skills. One of the responses attributed lack of funding for research in urban planning, which acts as a deterrent to identifying innovative ideas, which could bring in reform in pedagogy.

On the query of the type of additional and improved skills required to meet newer urban challenges in an improved and new planning programme, the majority felt that urban management and policy analysis were most important followed by urban finance, planning law and climate change and disaster risk reduction. This has been represented in Figure 3.

A very important part of bringing in reforms in planning education is regular updation through engagement with various stakeholders in the planning fraternity. This includes the alumni who have already been tested for their planning skills in the open market. Thus it is very important to be connected to the alumni network and keep them in the loop to avail of regular feedback in order to identify gaps and undertake necessary changes in the curriculum. Most schools agreed that though there is interaction with the alumni in occasional meetings, etc., a regular involvement with them when revising syllabus or taking into account their views to bring about modifications is not a normal formalised process.

### FIGURE 3: STREAMS WHICH CAN PRODUCE SKILLED PLANNERS IN ORDER OF THEIR SIGNIFICANCE

<table>
<thead>
<tr>
<th>Streams</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban management</td>
<td>8</td>
</tr>
<tr>
<td>Urban finance</td>
<td>7</td>
</tr>
<tr>
<td>City plan preparation and evaluation</td>
<td>6</td>
</tr>
<tr>
<td>Climate Change and Disaster Risk Reduction</td>
<td>5</td>
</tr>
<tr>
<td>Community Planning</td>
<td>4</td>
</tr>
<tr>
<td>Policy analysis</td>
<td>3</td>
</tr>
<tr>
<td>Urban planning law</td>
<td>2</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>1</td>
</tr>
<tr>
<td>Behavioural Planning</td>
<td>1</td>
</tr>
</tbody>
</table>

**Observations from Graph**
- Urban management is considered to be the most important stream by majority.
- Urban finance being the second most important
- Urban planning law holds the third position as suggested by only two respondents
- Policy analysis is significantly important
- City plan preparation and evaluation, community planning hold constant position of 5 and 6 respectively.
- Behavioural, climate change and disaster risk reduction, strategic planning come at around 7/8th position.

Source: Author’s Analysis
A comparison of the above with the current syllabi shows that most schools have urban management, planning law and urban finance modules incorporated in their programme in some form or other, as also climate change and disaster modules. Urban policy analysis has no direct subjects but is incorporated as part of the planning and management. Behavioral planning has been absent as a subject in most syllabi (see Table 3).

Training in communication and other soft skills forms an important and relevant aspect of planning education. Negotiation, group skills and various forms of visualisation skills are considered mandatory for planners in their profession. Some of these are addressed directly in the curricula while some are taught in the practical classes.

### TABLE 3: CHALLENGES AS ADDRESSED BY INDIAN PLANNING SCHOOLS

<table>
<thead>
<tr>
<th>Challenge</th>
<th>SPA-D</th>
<th>SPA-B</th>
<th>SPA-V</th>
<th>IIT-K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned urban development</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mobility</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Water and sanitation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Governance</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Environment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Innovation and technology</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Public spaces</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Gender equality</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Human rights</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Diversity and social harmony</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Citizens engagement</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Employment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

1. Planned urban development even though the most important has not been covered in any curricula.
2. Mobility, water and sanitation – there in all curricula
3. Governance and environment – covered in all except for IIT-K
4. Only SPA-Bhopal has incorporated technology in all required subjects.
5. Gender equality has been covered in all except for IIT-K
6. Human rights, diversity and social harmony are covered in none.
7. Citizens engagement has been partially covered in all.

### TABLE 4: SOFT SKILLS CONSIDERED RELEVANT FOR PLANNING EDUCATION BY PLANNING SCHOOLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>SPA-D</th>
<th>SPA-B</th>
<th>SPA-V</th>
<th>IIT-K</th>
<th>IIT-R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
</tr>
<tr>
<td>Negotiation</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
</tr>
<tr>
<td>Group work</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
</tr>
<tr>
<td>Visualisation skills with or</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td></td>
</tr>
<tr>
<td>without the help of GIS and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>remote sensing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy framing, analysis and</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td>☀</td>
<td></td>
</tr>
<tr>
<td>implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Communication, negotiation and group work have been marked relevant by most of the people.
- Visualisation skills and Policy framing, analysis and implementation come next.
- Mind mapping and public speaking are two skills mentioned to be included by IIT-K.

Source: Author’s Analysis
Imparting an effective combination of skills in the form of planning education requires institutional competency in which adequate vibrancy is needed to lead the dialogue in intellectual discourse. The curriculum should also have the ability to upgrade and improve its performance based on regular feedback received from the planning fraternity. Lack of this is partially responsible for making planning a low impact profession in India where involvement in decision-making and government’s policy making is also low. Planning being a multi-disciplinary subject, the faculty agreed that sometimes lack of comprehensive skills to be able to address certain issues professionally adds to this cause. This has direct relevance to the effectiveness of the education being imparted in the schools.

The above discussion thus brings to the fore a few important issues which need to be kept in mind while recommending a more effective planning curricula:

- Identification and Development of New Skills
- Enhancing Institutional Competencies
- Ability to upgrade itself based on feedback
- Bringing in reforms in planning education to match market demand
- Promoting planning education for spatial justice

The methodology applied to content analysis indicates that the existing curricula only partially addresses the concerns of the new urban agenda, which requires a different set of skills and knowledge. The Master’s level urban planning syllabi of the four Indian planning schools have been assessed against a framework of parameters, which should necessarily form part of the content. The parameters proposed have been derived from literature discussing a rethinking on all aspects of planning education – planners’ skills and competencies and what should be contained in the planning’s core curriculum under knowledge, practice and implementation, etc.

A framework of 14 indicators has been proposed explaining why they should be part of the curricula content (see Table 5).

### TABLE 5: PROPOSED PARAMETERS FOR CURRICULA ANALYSIS AND JUSTIFICATION FOR THEIR SELECTION

<table>
<thead>
<tr>
<th>Proposed Parameters</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Planning Knowledge</td>
<td>Scientific reasoning, moral reasoning and aesthetic reasoning form the core of planning knowledge. Planners are required to function as a body of knowledge that would be put to practice for designing the future of places. Thus these are the key levers available to planners in order to provide professional advice to the political leadership responsible for undertaking final decisions.</td>
</tr>
<tr>
<td>2. Planning Skills</td>
<td>In order to become an effective practitioner and even a researcher, a planner requires technical, communicative, analytical, and critical skills including critical assessment and examination, quantitative analysis, ability to use technologies like the GIS and remote sensing, and communication skills, etc.</td>
</tr>
<tr>
<td>3. Creative Problem Solving</td>
<td>Planning as a profession needs to face up to the task of problem solving. Creative problem solving through group work, observation and data collection through field visits, and working on live projects are normal work arenas for planners. Modern planning tools become even more important in the context of rapidly changing cities and regions and enhanced complexity of problems being faced by planners. In this complex and globally connected world planners are repeatedly invited to think innovatively. Do planning schools place enough emphasis on creative problem solving methods when approaching planning projects?</td>
</tr>
<tr>
<td>4. Collaborative &amp; Interdisciplinary Working Environment</td>
<td>Planners engage with their peers, other professionals and wide range of stakeholders. Growth and importance to all skill sets is necessary for creation of sustainable communities. In order to access various development related issues such as sustainability, growth, poverty, etc., training in these areas is required.</td>
</tr>
<tr>
<td>5. Critical Thinking</td>
<td>Critical thinking is an important aspect of creativity, which helps apply cognitive skills to unearth what the untrained eye cannot find. Do planning schools engage students enough to develop in them critical thinking necessary for successful and effective planning practices?</td>
</tr>
<tr>
<td>6. Project Management</td>
<td>Planners show results by working on concrete and tangible outcomes manifested in the form of planning projects. Project designing and implementation is critical to successful implementation of planning policies. Successful completion of a project requires resource management including financial management, coordination of various project tasks and multiple deadlines, contracts, budgeting, risk assessment, etc.</td>
</tr>
<tr>
<td>7. Communication</td>
<td>In communication, comprehensibility is highly significant as is integrity and truthfulness in what is being communicated. Therefore, communication in planning is much wider in scope than merely talking technically, dealing with clients, making effective presentations, technical writing, information gathering, analysing and sharing, negotiation, etc. As planners work amidst public representatives, administrators, technocrats and common people, they need these skills to negotiate in ever changing political environments, and also present their proposals to political representatives and communities effectively on a daily basis. Do planning schools lead planning students in this direction?</td>
</tr>
<tr>
<td>8. Community Engagement</td>
<td>Planning is about working in the field alongside local communities and yet maintaining a critical distance from them. Do planners get enough training and instruction about working in decentralised decision making environments where the planner is only one player among several others? Public engagement is about jointly creating visions, and coproducing and co-implementing planning policies and projects.</td>
</tr>
</tbody>
</table>
9. Spatial Thinking  
Planners work at a scale that requires an overall understanding of spaces and context.

10. Technological Environment  
They need to be aware of the current technological environment; as the world is changing, so is technology. Being updated, their work can be more reflective.

11. Policy Analysis  
Planners must have a complete understanding of policy framing, implementation etc., so that they can connect with the administrative system when there is a need to do so.

12. Power Structure  
How are planning students made to understand and comprehend power and power structures? How does power manifest itself? Knowledge of institutional set-ups, legal frameworks and policy contexts are equally important. Planners must understand that they have to necessarily work in a political environment. Do planning schools teach about the political power structure and honesty in planning?

13. Coherence  
Everything in the curriculum should have some point of intersection with each other as all the knowledge and skills together make for an effective planner. Each component of a curriculum must lead to a certain vision about the training of planners. How far do academic institutions move in this direction?

14. Ethics  
Ethics is about the premise on which a planner bases and conducts his/her public life as a professional. This will have a certain relation with his/her personal beliefs. The question of planning ethics involves training about probity, sincerity, truthfulness, integrity, etc. and also a belief in the ability of planning to do good for those who have been placed at the margins of society in both cities and regions. Planning involves dealing with tough ethical and moral dilemmas. How far do planning schools train planning students to deal with the above concerns?

Source: Literature Review and Author’s Analysis

Suggested list of parameters only help in understanding the elements needed for an effective content. Each curriculum was evaluated against the fourteen indicators listed in Table 5 along with the AICTE prescribed model curriculum. This exercise helped in identifying the gaps in the individual curricula. Likewise, the analysis has identified the strengths of each of them. Core subjects in a syllabus indicate their priority while electives, being optional, depend on an individual's interest. Assessment criteria attached to some indicators has helped in understanding the importance given in the learning process, e.g., if the internal assessment method along with the theoretical examination has a seminar presentation of a practical case study attached to it, it ensures a balanced learning outcome. Pedagogy checks the method and practice of teaching for certain parameters like critical thinking (Annexure 2).

While analysing content of the syllabus of each of the four schools against the proposed parameters and the AICTE model curriculum for the Master's programme (brought out in an effort to standardise the curricula of post-graduate planning offered in the planning schools), both strengths and weaknesses are identified based on which the gap has helped frame the recommendations.

**Planning school I** has more or less followed the AICTE model as also SPA Bhopal. However, diversification of planning courses (number of specialisations in Masters of Planning programme) has been observed in this planning school; to a large extent it enjoys the flexibility and innovation to incorporate the relevant courses that are demanded in professional practice. In the domain of planning knowledge, an important mandate like urban poverty (inclusive planning) is an elective subject. Also, the socio-economic basis for planning is an important foundation and forms the basis for conducting many practical exercises, but this is completely missing in the syllabus. Disaster management along with environmental issues form a core module giving them the priority these subjects deserve in today's urban scenario, but climate change, which is an equally important reality in our cities today, has been clubbed with energy and relegated to an elective.

Critical thinking, planning skills and creative problem solving are three parameters, the strong presence of which, in the syllabus, will play a key role in enabling future planners to be able to perform in the open market. While this school's urban planning modules try to address this in a traditional way (design studio, live projects, field work, focused group discussions surveys, mapping), skills like communication, negotiation and visual interpretation, etc., which are essential cognitive skills to be applied in order to decipher those relevant areas that miss the untrained eye, are not highlighted. Creative problem solving in a globally competitive world through innovative ideas is definitely an essential skill.

**Planning school II** misses out on addressing three key areas of planning: inclusive, heritage conservation, and politics and planning as their core courses. While analytical skills, which should form an important part of planning curricula are dealt separately as ‘Quantitative Methods and Systems Analysis’, creative problem solving methods with innovative thinking need more strengthening. Interlinkages need to be strong in a multidisciplinary subject, which is currently limited to collaborative projects only in studios. However community engagement in a planning process is one of the very important indicators and this school covers ‘citizens’ participation in urban governance’ under the module of ‘Local Governance, Management and Finance’ and public participation and plan implementation gets addressed under ‘Planning Techniques’. Though
policy analysis gets addressed in the module of ‘Public Policy Analysis’ as an elective subject, planning ethics, which is an essential component of ethics in professional practice and the premise on which a planner conducts his or her public life as a professional is completely missing.

Planning school III is in a better place in the domain of planning knowledge as scientific, moral and aesthetic reasoning which form its core are represented through its modules. It has very strong representation of various analytical and advanced research methods (ARM), both quantitative and technical, which provide the basis for enhanced planning skills and problem solving to a fair extent. Also, research communication under ARM strengthens technical writing skills and oral communication. However, critical thinking is also an important aspect of creativity, which is limited largely to studio exercises. Implementation of planning policy and comparative policy analysis are modules under ‘Evolution of Human Settlements and Planning’ and ‘Housing and Environmental Planning’ respectively. Planning ethics is covered under ‘Planning Legislation and Professional Practice’. Project management is another important parameter, which can add to a planner’s skill by working towards tangible outcomes in planning projects. The design of projects and their successful implementation are crucial to informing public policy. The institution partially covers this under project planning and management where development finance covers risk assessment and budgeting.

Planning school IV deviates from the model AICTE curriculum and many of the important subjects are listed under electives. The syllabus offers a strong mix of both core and elective subjects covering the section of scientific reasoning under planning knowledge. However, moral and aesthetic reasoning covers very few subjects; Planning Legislation and Professional Practice and Human resource in the former and Urban Design and Landscape in the latter, most of which are elective subjects. An effective practitioner requires high level planning skills that are partially covered with technical, quantitative and limited communicative skills. Negotiation, critical assessment etc. are not shown as a priority. The participatory planning process seen through community engagement is covered under ‘Development Management’ in a module called Citizen’s Participation but the methods used are not elaborated. Comprehension of politics and power structures should form an important component of planning where interface between national and local goals, the political eco-system and planning with politics need to be taught. Management, governance and legal issues as is present in the current syllabus do not incorporate the above.

The selected planning schools in India, have incorporated the majority of the thematic contents in three broader levels of pedagogies such as:
1) theoretical and conceptual understanding of the issues
2) analytical tools and skill development
3) surveying and field techniques essential for the profession (Table 6).

However, there has been a serious lack of social equity/justice, participatory planning tools and techniques, deliberative and communication skills across all the above selected planning schools in India (Annexure 1). Planning schools across the world are now required to incorporate these themes in their curricula in order to better equip planning professionals for 21st century planning agendas (UN-Habitat, 2009). Gender issues and urban poverty modules are almost completely missing in the course curricula of the Indian planning schools.
TABLE 6: COURSE CONTENT AND ITS RELEVANCE TO URBAN AGENDA

<table>
<thead>
<tr>
<th>Schools/Thematic course content being offered</th>
<th>SPA New Delhi</th>
<th>SPA Vijaywada</th>
<th>IIT Kharagpur</th>
<th>SPA Bhopal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical Understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Planning And Design</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Sustainable Development</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Social Equity/Justice</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>✔</td>
</tr>
<tr>
<td>Participatory</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Deliberative</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Communicative</td>
<td>×</td>
<td>✔</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Climate Change</td>
<td>✔</td>
<td>✔</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>Gender and Planning</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Inclusive Planning</td>
<td>✔</td>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Policy focus</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Analytical Tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geospatial Science</td>
<td>×</td>
<td>×</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>GIS-Digital Mapping</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Modelling for decision</td>
<td>×</td>
<td>×</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Survey Techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field Visits</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Reconnaissance</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Photo documentations</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Survey methods</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>PRA</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Source: Author’s Analysis

THE FUTURE OF PLANNING EDUCATION — RECOMMENDATIONS FOR A REVISED CURRICULA

The gap between current planning practice and planning education has not been bridged since the internationalisation of the Indian economy in the early 1990s. This itself is reason enough to rethink the kind of planning education Indian schools should be offering to students throughout the country. However, apart from ever changing planning practices, the nature of urban development has also been greatly transformed over the last three decades. The private sector has become a prominent player in the planning and development of our cities and towns. In some cases, it has been involved in building entire cities such as Magarpatta in Maharashtra, and others. Local government decision processes have been devolved through constitutional amendments since 1992. The city has become and remains the most prominent site of economic growth as most wealth is created in cities and towns. If we accept that planning practices and actually the existing ways of planning cities and towns in India have greatly changed and will continue to change, it is imperative to have a rethink about the nature of planning education today. Since the rational comprehensive planning model centered on physical planning no longer holds sway anywhere in India, we have to invent new and innovative ways of planning and development. One source that could introduce these new ways is by changing the sphere of planning education.

The curricula in planning schools must also address the current challenges of urbanisation that India is experiencing. Students must be trained in relevant skills and knowledge capable of addressing these current urban challenges and opportunities. Not only will parts of existing cities and towns be redeveloped in the near future, but new infrastructure has to be provided for new and different kinds of businesses and services that may have never existed before. For instance, manufacturing in all probability is likely to give way more and more to the services sector. Planning education must take a lead in addressing such changes.
In light of the above-discussed concerns, the following recommendations to transform planning education have been made:

1. Planning educators should diversify the knowledge base by entertaining a variety of knowledge and information when teaching planning students. Students should be actively encouraged to use a wide knowledge base (for example, experiential knowledge) and reasoning in practical studios and in theoretical subjects. This change has become urgent as our analyses has shown that most of the planning schools are focused on instrumental reasoning, and mostly leave out moral and aesthetic reasoning.

2. Largely focusing on land use planning makes planning education incomplete because this kind of focus presumes that political, social and economic aspects and also the lived experiences do not matter in decision making processes. In the real world, which is where planning students are expected to work, training and understanding of political, economic and social aspects is absolutely necessary. This means that the scope and nature of planning education should be changed to include training for comprehending the links between physical planning and other spatial and societal aspects that have a strong bearing on the built environment. For example, redevelopment involves understanding not only of physical planning but also social, political and most of all economic processes entangled in what appears to be a land use planning exercise.

3. Planning curricula should be standardised only to the extent that core competencies are taught to all students irrespective of their physical location in the country. But knowledge pertinent to each local context should also be prominently taught to the students. This would require that the planning faculty conducts deeper empirical research themselves on areas of local importance. For example, a planning school located in a hilly area with a large percent of tribal population should focus on hill environment as well as the culture and needs of the local population.

4. Mobility of faculty and students should be encouraged as this will promote inter-institutional collaboration facilitating innovation and improved learning outcomes. Planning students as well as planning faculty should be encouraged to spend three months or a semester learning and teaching in other planning schools.

5. Established international academics and professionals should be invited to Indian planning schools to give exposure to students and faculty of the global and state of the art thinking in the planning world. Government run planning schools are beginning to take advantage of financial assistance provided to global academics under GIAN programme of the MHRD. Similar arrangements should be made for private planning institutions where funds could be gathered from private sources with top-up funding provided by the government.

6. As the nature of urbanisation in India is changing (increasing population and geographical size of urban settlements), new subjects with enhanced vigour and emphases should be introduced. Increased emphasis should be placed on subjects like urban management, urban finance for development projects, and policy planning and analysis. New environmental concerns have been highlighted in new global policies such as the SDGs and the New Urban Agenda. These global policies should be viewed as opportunities as they give a lot of importance to urban planning and management. Planning educators should see how these new opportunities could be harnessed to make planning education more relevant for resolving societal problems –environmental and others. NITI Aayog is endeavouring to translate SDGs into national planning agenda. This is an opportunity for the planning fraternity, particularly planning academics, to engage with these issues.

7. Global survival issues such as climate change, city resilience, environmental sustainability, and other ecological considerations should be built into the planning curricula in such a way that these concerns transcend all subjects taught in planning schools. Separately teaching environment related subjects disconnects the environment from lived experiences and decision making processes.

8. Inclusion of methodologies and tools from the social sciences and management disciplines in the planning curriculum is beneficial. These can play a very important role as they offer training in human and behavioural aspects while planning techniques generally focus on scientific aspects.

9. Management skills such as those required for effective negotiations, conflict resolution and mediation, as well as advocacy need to be incorporated in planning education. Studios and practical exercises could be designed in ways that incorporate teaching of these skills. Group learning should be formalised in the studios.

10. Modules on identity including gender, inclusivity, equity and justice, and civic engagement should be included in the
planning curricula. From information received from the faculty, these are currently not included in curricula except in the passing. Several subjects related to the social context, but more particularly those focused on ‘public participation’ would be extremely relevant.

11. In order to successfully bring about transformation, attention needs to be drawn to pedagogy i.e. a methodology for delivery of content. Since pedagogy is dynamic and requires regular review, we propose that a Centre for Pedagogical Research and Innovation should be established. Leading international academic institutions have such centres. For example, the National Institute of Education in Singapore has the Centre for Research in Pedagogy and Practice, which aims to advance knowledge for promoting improvement of teaching and learning. The Centre for Pedagogical Innovation at the Wesleyan University in Connecticut has the Centre for Pedagogical Innovation, which is dedicated to inspiration, incubation and dissemination of pedagogical innovation and learning. The Brock University in Canada has the Centre for Pedagogical Innovation, which is committed to fostering a culture of excellence in teaching and learning across the university.

12. Apprenticeship and mentoring could be enhanced through internship through deeper association with industry, local government bodies, and other relevant planning and development agencies. Planning schools should actively promote academic-industry-government links and help students to reach out and benefit from a variety of opportunities. Mandatory training in the form of apprenticeship, internship, etc. should be made part of the curricula for a semester by either increasing the duration of a Master’s programme or by compressing other aspects of the curriculum.

13. Planning schools must engage in increasing their visibility, respectability and promote continuous engagement with colleges and universities to orient students to the planning domain before they choose their different career paths. This would give students wider and more informed choices based on their interests.

14. Curriculum development should be designed through comprehensive consultations both within a planning school as well as with practitioners and other stakeholders including parents. The normal process followed during curriculum development is to present it to the academic council of a planning school before getting it ratified by the board of governors. Alumni should also play an important role in this process. We believe that a planning school’s capacity to effect radical changes enhances manifold through wider and deeper consultations.

15. Another significant aspect that is missing from the Indian system of planning education is that a body like a national forum of planning schools does not exist. We propose that a National Council of Planning Schools should be established as quickly as possible. This will facilitate greater and sustained interactions and across the board learning among planning schools. The faculty and students of planning will remain primary stakeholders but others interested in planning should be also encouraged to enroll and play an active part in this body.

16. The academic environment in planning should be made more innovative and flexible to inculcate critical thinking and reflection among the students. Questioning must never stop in the planning academy. Planning schools should particularly pay attention to organising seminars and conferences led by the students and faculty promoting out-of-the-box ideas alongside regular opportunities being offered in the classrooms.

CONCLUDING REMARKS
Introducing changes in established programmes and curricula is difficult. A forward-looking curriculum model that combines old and new pedagogies and content takes considerable rethinking and effort to implement. Current approaches to and methods of urban planning are, inadequate for an effective urban policy analysis. Intervention in urban policymaking is a continuous process. If planners are serious about redirecting the profession’s energies toward policy planning, the curricula must be redesigned to provide the skills, knowledge, and experience necessary for effective management of urban change. The author would like to highlight the need for imagination, which Einstein called as more important than knowledge.

Education is a means to enhance one’s imagination by exposing oneself to the many unknown aspects about spatially adjacent as well as remote realities. In order to achieve sustainable and liveable urban systems, it is important that more young minds are exposed to the benefits of planned communities. The greater number of people with appropriate

trainings will also help in building a popular imagination of liveable communities especially when they also have a dose of entrepreneurship trainings in planning schools.

Thus, it is of utmost importance that planning education should seek to undo the isolation of planners from the mainstream of institutions and organisations engaged in the formulation and implementation of policies, programmes and projects for urban development. Today, town planners not only need to be educated about development plan making, public policy framing, and enforcement of development control norms, but they should also acquire skills for effective communication, negotiation and mediation with competing priorities through creative solutions and looking at the diverse perspectives of stakeholders and the political leaderships. The schools of planning will therefore be required to reorient their education programmes to address the new challenges and issues that will arise with the new orientations toward urban development management and governance.
REFERENCES


Multi-disciplinary Design Education in the UK. (2010)


## Annexure 1

### URBAN PLANNING CURRICULA OF THE PLANNING SCHOOLS

<table>
<thead>
<tr>
<th>Course Name</th>
<th>School of Planning &amp; Architecture, New Delhi</th>
<th>School of Planning &amp; Architecture, Bhopal</th>
<th>School of Planning &amp; Architecture, Vijayawada</th>
<th>Indian Institute of Technology, Kharagpur</th>
</tr>
</thead>
<tbody>
<tr>
<td>M. Planning with specialization in Urban Planning</td>
<td>M. Planning with specialization in Urban Planning</td>
<td>Masters in Urban and Regional Planning</td>
<td>M. Planning (Urban and Regional Planning)</td>
<td>Masters in City Planning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Structure</th>
<th>Semester - I</th>
<th>Semester - II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning History and Theory</td>
<td>Planning History and Theory</td>
<td>Planning History and Theory</td>
</tr>
<tr>
<td>Socio-economic basis for Planning</td>
<td>Economics and Urban Sociology</td>
<td>Socio-Economic Dimensions of Planning</td>
</tr>
<tr>
<td>Planning Techniques</td>
<td>Planning Techniques</td>
<td>Planning Techniques and Quantitative Methods</td>
</tr>
<tr>
<td>Infrastructure and Transport Planning</td>
<td>Infrastructure Planning</td>
<td>Infrastructure Planning</td>
</tr>
<tr>
<td>Housing and Environmental Planning</td>
<td>Housing and Environmental Planning</td>
<td>Habitat and Environment Planning</td>
</tr>
<tr>
<td>Studio course</td>
<td>Integrated Studio</td>
<td>Area Planning Studio</td>
</tr>
<tr>
<td>Demography and Quantitative Methods</td>
<td>Introduction to Information Systems</td>
<td>Housing and Community Planning</td>
</tr>
<tr>
<td>Seminar</td>
<td>Planning Workshop</td>
<td>Statistical Technique and Computer Programming</td>
</tr>
<tr>
<td>Infrastructure Planning</td>
<td>Planning Legislation</td>
<td>Planning Legislation and Planning Practice</td>
</tr>
<tr>
<td>Urban Heritage Conservation</td>
<td>Local Governance, Management and Finance</td>
<td>Urban and Regional Governance</td>
</tr>
<tr>
<td>Advanced Planning Techniques</td>
<td>Land Economics and Real Estate</td>
<td>Land Economics and Management</td>
</tr>
<tr>
<td>Studio Course</td>
<td>Studio - Regional Planning</td>
<td>Urban Planning Studio</td>
</tr>
<tr>
<td>Planning Workshop</td>
<td>Planning Workshop</td>
<td>Planning Workshop</td>
</tr>
<tr>
<td>Inclusive Urban Planning</td>
<td>Transportation Planning and Management</td>
<td>Applications of Geoinformatics</td>
</tr>
<tr>
<td>Planning for Tourism</td>
<td>Geoinformatics Laboratory</td>
<td>Inclusive Planning</td>
</tr>
<tr>
<td>Smart Cities</td>
<td>Planning Informatics</td>
<td>Regional Analysis and Programming</td>
</tr>
<tr>
<td>Planning Informatics</td>
<td>Planning Informatics</td>
<td>Environmental Planning</td>
</tr>
<tr>
<td>Urban Renewal</td>
<td>Urban Conservation Studies</td>
<td>Urban Design</td>
</tr>
<tr>
<td>From other Masters Programme (Same Semester)</td>
<td>Landscape &amp; Recreation Planning</td>
<td>Metropolitan Planning</td>
</tr>
<tr>
<td>Smart Cities</td>
<td>Remote Sensing and GIS in Planning</td>
<td>Disaster Management</td>
</tr>
<tr>
<td>New Town Planning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* SPA-Delhi and SPA-Bhopal course curriculum is same as the model curriculum provided by the AICTE for post-graduate programs. * IIT-Kharagpur, on the other hand, deviates from the model AICTE curriculum, the course forgoes many of the important subjects as most of them are listed under electives.
### Semester - III

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
<th>Course</th>
<th>Course</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Planning and Management</td>
<td>Project Planning and Management</td>
<td>Project Appraisal and Management</td>
<td>Project Planning and Management</td>
<td>Professional Training (Summer)</td>
</tr>
<tr>
<td>Urban Governance</td>
<td>Urban Governance</td>
<td>Disaster Mitigation and Management</td>
<td>Disaster Preparedness and Management</td>
<td>• SPA-Bhopal and IIT-Kharagpur curriculum emphasis on professional training before the session for third semester begins.</td>
</tr>
<tr>
<td>Politics and Planning</td>
<td>Politics and Planning</td>
<td>Thesis Programming</td>
<td>Advanced Research Methods</td>
<td>• IIT-Kharagpur has focus only on thesis project as the other subjects have been taught in the previous semesters.</td>
</tr>
<tr>
<td>Studio</td>
<td>Studio</td>
<td>Studio - Urban Planning</td>
<td>Regional Planning Studio</td>
<td></td>
</tr>
<tr>
<td>Environment, Development and Disaster Management</td>
<td>Environment, Development and Disaster Management</td>
<td>Urban Redevelopment</td>
<td>Planning Legislation and Professional Practice</td>
<td></td>
</tr>
<tr>
<td>Energy, Climate change and Urban Development</td>
<td>Energy, Climate change and Urban Development</td>
<td>Planning for Tourism</td>
<td>Future Settlements</td>
<td></td>
</tr>
<tr>
<td>Quantitative Methods and Systems Analysis</td>
<td>Special Area Planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning for Special Areas</td>
<td>Human Settlements and Climate Change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable Planning Practices</td>
<td>Tourism Development and Planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Training (Summer)</td>
<td>From other Masters Programme (Same Semester)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Semester - IV

<table>
<thead>
<tr>
<th>Course</th>
<th>Course</th>
<th>Course</th>
<th>Course</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Finance</td>
<td>Development Finance</td>
<td>Seminar on Emerging Planning Concerns</td>
<td>Development Finance</td>
<td>Thesis Part - II</td>
</tr>
<tr>
<td>Legal Issues and Professional Practice</td>
<td>Legal Issues and Professional Practice</td>
<td>General Proficiency</td>
<td>Planning and Politics</td>
<td>• The curriculum focus is majorly on thesis project and legal issues faced in the practice.</td>
</tr>
<tr>
<td>Thesis</td>
<td>Thesis</td>
<td>Thesis</td>
<td>Thesis</td>
<td></td>
</tr>
<tr>
<td>PPP in Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Policy Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Annexure 2

**FRAMEWORK FOR CONTENT ANALYSIS OF CURRICULA**

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>AICTE</th>
<th>SPA D</th>
<th>SPA B</th>
<th>SPA V</th>
<th>BT K</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning Knowledge:</strong> Scientific reasoning, moral reasoning and aesthetic reasoning form the core of planning knowledge. Planners are required to acquire a body of knowledge that would be put to practice for designing the future of places. This essential knowledge enables performance of planning activities. Thus these are the key levers available to planners in order to provide professional advice to the political leadership responsible for undertaking final decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Scientific:</strong> 1. Planning History &amp; Theory (C) 2. Socio-economic basis for Planning (C) 3. Planning Techniques (C) 4. Infrastructure and Transport Planning (C) 5. Housing and Environmental Planning (C) 6. City &amp; Metropolitan Planning (C) 7. Infrastructure Planning (C) 8. Advanced Planning Techniques (C) 9. Urban Development Management (C) 10. Project Planning &amp; Mgmt. (C) 11. Urban Governance (C) 12. Politics &amp; Planning (C) 13. Environment, Development and Disaster Management (E) 14. Energy Climate Change and Urban Development (E) 15. Development Finance (C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Moral:</strong> 16. Inclusive Planning (C) 17. Legal Issues and Professional Practice (C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Aesthetic:</strong> 18. Urban Heritage Conservation (C) 19. Planning for Tourism (E)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ASSESSMENT CRITERIA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>End evaluation + Internal assessment (discussions, presentation, tests, case study, critical review)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. Planning Skills:</strong> In order to become an effective practitioner and even a researcher, a planner requires technical, communicative, and analytical, and critical skills. Planners practitioners therefore ought to have a bookie of skills including critical assessment and examination, quantitative analysis, ability to use technologies like the GIS, remote sensing, etc. and communication skills to name a few.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Survey tech, GIS mapping, research, design implementation, analytical, presentation, report writing</td>
<td>Technical (Survey tech, GIS mapping)</td>
<td>Analytical</td>
<td>Communicative</td>
<td>Critical assessment</td>
<td>Quantitative</td>
</tr>
<tr>
<td>planning techniques</td>
<td>Technical (research design &amp; implementation, spatial representation)</td>
<td>Analytical</td>
<td>Communicative (technical writing)</td>
<td>Critical assessment</td>
<td>Quantitative</td>
</tr>
<tr>
<td><strong>3. Creative Problem Solving:</strong> Planning being a profession needs to face up to the difficult task of problem solving. Creative problem solving through group work, observation and data collection through field visits, and working on the live projects are normal work areas of planners. Modern planning tools become even more important in the context of rapidly changing cities and regions and enhance complexity of problems being faced by planners. Planners in this complex and globally connected world are repeatedly invited to think innovatively. Does planning schools place enough emphasis on creative problem solving methods when approaching planning projects?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Group work</em></td>
<td><strong>Field visits</strong></td>
<td><em>Live projects</em></td>
<td><strong>Field visits</strong></td>
<td><em>Live projects</em></td>
<td><strong>Field visits</strong></td>
</tr>
<tr>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
</tr>
<tr>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
</tr>
<tr>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
<td><strong>Field visits</strong></td>
<td><em>Group work</em></td>
</tr>
</tbody>
</table>

* Texts in blue are those modules in addition to the AICTE prescribed modules.
### 4. Collaborative and Inter-disciplinary Working Environments:

Planners engage with their peers, other professionals, and a wide range of stakeholders. Growth and importance to all skill sets is necessary for creation of a sustainable community. In order to access various developmental issues such as sustainability, growth, poverty, etc., training in these areas is required.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>AICTE Scientific</th>
<th>Scientific</th>
<th>1. Planning History and Theory (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5. Critical Thinking:

Critical thinking is an important aspect of creativity, which helps apply cognitive skills to unearth what an unseen eye cannot. Do planning schools engage enough students to develop critical thinking necessary for successful and effective planning practices?

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Not mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedagogy</td>
<td>Not mentioned</td>
</tr>
</tbody>
</table>

### 6. Project Management:

Planners show results by working on concrete and tangible outcomes in the form of planning projects. Project designing and implementation is critical to successful implementation of planning policies. Successful completion of a project requires resource management including financial management, coordination of various project tasks, and multiple deadlines, contracts, budgeting, etc.

<table>
<thead>
<tr>
<th>Project Management</th>
<th>Legislation</th>
<th>Project appraisal and management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project planning</td>
<td>Project appraisal and management</td>
</tr>
<tr>
<td></td>
<td>Project evaluation and monitoring</td>
<td>Project appraisal and management</td>
</tr>
<tr>
<td></td>
<td>Risk assessment</td>
<td>Project appraisal and management</td>
</tr>
</tbody>
</table>

### 7. Communication:

An act of communication implies that a message is sent by a sender through a channel and is received and understood by a recipient. After receiving a message, the recipient responds to the sender. Comprehensibility is therefore highly significant as is integrity and truthfulness of what is being communicated. Therefore, communication in planning is much wider in scope than merely talking with clients, making effective presentations, writing, information gathering, analyzing and sharing, etc.

<table>
<thead>
<tr>
<th>Communications</th>
<th>Presentations</th>
<th>Analyzing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 8. Community Engagement:

Planning is about working in the field alongside local communities and maintaining a critical distance from them. Do planners get enough training to work in decentralized decision-making environments where planners are not only one among several others? Public engagement is about creating visions and co-implementing planning policies and projects.

<table>
<thead>
<tr>
<th>Community Engagement</th>
<th>Participatory planning process, methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARAMETERS</td>
<td>AICTE</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>9. Spatial thinking</td>
<td>Planners work at a scale that requires a great understanding of spaces and context.</td>
</tr>
<tr>
<td>10. Technological environment</td>
<td>They need to be aware of the technological environment in the background, as the world is changing and so is technology. Being updated, their work can be more reflective.</td>
</tr>
<tr>
<td>11. Policy analysis</td>
<td>A complete understanding of the policy framing, making, implementation etc., so that planners get hold of the administrative system where there is dire need of them.</td>
</tr>
<tr>
<td>12. Power Structures:</td>
<td>Power is everywhere. How do planning students are made to understand and comprehend power and power structures. How power manifests itself. Knowledge of institutional setup, legal frameworks and policy contexts are equally important. Planners must understand that they have to necessarily work in a political environment. Do planning schools teach about power in planning and speaking truth to power?</td>
</tr>
<tr>
<td>14. Ethics:</td>
<td>Ethics are about the premises on which a planner’s basis and conducts her public life as a professional. This will have a certain relation with her personal beliefs. The question of planning ethics involves training about probity, sincerity, truthfulness, integrity, etc and also a belief in the ability of planning to do good for those who have been placed at the margins of a society made up of cities and regions. Planning involves dealing with tough ethical and moral dilemmas. How far planning schools train planning students to deal with the above concerns?</td>
</tr>
</tbody>
</table>

*Recommendations for an Improved Master’s Level Urban Planning Curricula*
RECOMMENDATIONS FOR AN IMPROVED MASTER’S LEVEL URBAN PLANNING CURRICULA

PARAMETERS

AICTE

SPA D

SPA B

SPA V

IIT K

9. Spatial thinking

Planners work at a scale that requires a great understanding of spaces and context.

Spatial thinking has been incorporated in almost every subject.

Learning outcome includes “Appreciation of spatial and other dimensions”.

Owing to the importance of data to be related spatially, GIS has been incorporated in “Advanced planning techniques”.

Spatial thinking has been incorporated into subjects like “Regional Planning and Development (C)”, “Transport Plng and Mngt. (C)”, “Urban Redevelopment (E)”, “Planning Techniques (C)”, “Studio”.

Spatial thinking has been incorporated in most of the subjects.

10. Technological environment

They need to be aware of the technological environment in the background, as the world is changing and so is technology. Being updated, their work can be more reflective.

Mention of Technological environment in subjects like:

• Infrastructure Planning (C)
• Environment, Development and Disaster Management (E)

Though a mention of “Technological considerations” in course objectives but subject modules do not have it.

Technology being considered in subjects like: “Infrastructure Planning (C)”, “Disaster Mitigation And Mngt. (C)”, “Transport Planning and Mngt. (C)”.

Relation between technology and planning has been considered very well in “Future settlements”. It has been also been mentioned in “Disaster preparedness and management”.

Considered only in “Transportation Planning And Traffic Engineering (C)”.

11. Policy analysis

A complete understanding of the policy framing, making, implementation etc., so that planners get hold of the administrative system where there is dire need of them.

“Policies and programmes at various levels” only, for various subjects.

A module on “Urban Policies and programmes”.

Each subject also has specific module dedicated to policies related to that subject.

Subjects:

- “Public Policy Analysis (E)”
- Policy Analysis in “Urban Redevelopment (E)”

Evolution of Human Settlements and Planning (C) – Implementation of planning policies

Habitat and environment planning (C) – Comparative policy analysis

12. Power Structures:

Power is everywhere. How do planning students are made to understand and comprehend power and power structures. How power manifests itself. Knowledge of institutional setup, legal frameworks and policy contexts are equally important. Planners must understand that they have to necessarily work in a political environment.

Do planning schools teach about power in planning and speaking truth to power?

Interface b/w national goals, political eco. System

Politics and planning

Urban governance

Management and governance plans

Legal issues

Understand interplay of politics in the planning process in the subject “Politics & planning (C)”.

Interface b/w national goals and political economic system discussed in subjects like:

• Politics and planning (E)
• Urban governance (C)

“Local Governance Management and Finance (C)”

This subject talks alone of local governance and not the interplay between social, economic, cultural and political contexts and the challenges planners face in political context.

“Planning and Politics (C)”

None of the subjects intend to develop an understanding of these aspects.

14. Ethics:

Ethics are about the premises on which a planners basis and conducts her public life as a professional. This will have a certain relation with her personal beliefs. The question of planning ethics involves training about probity, sincerity, truthfulness, integrity, etc. and also a belief in the ability of planning to do good for those who have been placed at the margins of a society made up of cities and regions. Planning involves dealing with tough ethical and moral dilemmas. How far planning schools train planning students to deal with the above concerns?

Ethics in “Professional practices (C)”

Ethics covered under a module (Legal issues and professional practice in planning)

Not in curricula “Planning Legislation and Professional Practice (C)”

Research ethics module in “Advanced research methods (C)”
<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>SPA-D</th>
<th>SPA-B</th>
<th>SPA-V</th>
<th>IIT-KGP</th>
<th>IIT-R</th>
</tr>
</thead>
<tbody>
<tr>
<td>CV</td>
<td>SS</td>
<td>BC</td>
<td>AT</td>
<td>SC</td>
<td>AB</td>
</tr>
</tbody>
</table>
| 1. What are the kinds of challenges are being faced by the Indian cities and towns? Select as many as possible. Please prioritize them by placing numbers, starting with 1 for the most significant challenge:  
• Planned Urban Development  
• Mobility  
• Environment  
• Water & Sanitation  
• Governance  
• Citizens’ engagement  
• Employment  
• Diversity & social harmony  
• Gender Equality  
• Public Spaces  
• Human Rights  
• Innovation and Technology  
• Any others please specify. | Planned urban development  
• Lacking in basic infrastructure planning and management  
• Urban technology change has not been captured by any plan  
• Financing a master plan (totally lacking)  
• Planned urban development  
• Mobility  
• Environment  
• Water and sanitation  
• Governance  
• Innovation and Technology | Planned urban development  
• Environment  
• Water and sanitation  
• Citizens’ engagement  
• Public Spaces  
• Environment  
• Mobility  
• Innovation and Technology  
• Governance  
• Diversity & social harmony  
• Employment  
• Human Rights  
• Citizens’ engagement  
• Innovation and Technology | Employment  
• Water and sanitation  
• Environment  
• Mobility  
• Diversity & social harmony  
• Environment  
• Public Spaces  
• Human Rights  
• Gender equality  
• Planned urban development  
• Citizen engagement  
• Innovation and Technology | (It should be multi and interdisciplinary with urban planning, legislation, governance, management, regional development, city plan preparation, urban design and place making, urban economics) |
| 2. Do you think urban planning curriculum in your institution adequately addresses (depth and scope) these challenges of Indian urbanization?  
• Yes  
• No  
• Cannot say  
If yes, skip question 3 and go to question 4. | Yes  
| Cannot say | No | Yes | Yes | Partially |
| 3. If no, in which direction should urban planning education move in order to effectively face these urban challenges?  
• Increased emphasis on urban management  
• Policy analysis  
• Place increased emphasis on urban finance  
• Course on policy analysis  
• Course on urban finance  
• Urban planning law  
• City plan making and evaluation  
• Course on urban management  
• Course on policy analysis  
• Course on urban finance  
• Course on urban planning law  
• Course on city plan preparation and evaluation  
• Any others please specify. | Increased emphasis on urban management  
• Policy analysis  
• Place increased emphasis on urban finance  
• Course on policy analysis  
• Course on urban finance  
• Urban planning law  
• City plan making and evaluation  
• Course on urban management  
• Course on policy analysis  
• Course on urban finance  
• Course on urban planning law  
• Course on city plan preparation and evaluation  
• Any others please specify. | Increased emphasis on urban management  
• Policy analysis  
| | | | | |
How is your institution contributing to or engaging in the following missions on urban India?

- Swachh Bharat (Urban)
- Smart Cities
- Atal Mission for Rejuvenation and Urban Transformation (AMRUT)
- National Heritage City Development and Augmentation Yojana (HRIDAY)
- Swachh Bharat (Awareness campaign in nearly villages of our school and waste collection drive has been periodically observed by the students, staff and faculty of our school) Design Innovation Centre focuses on Start up.
- Smart Cities (SPA, Bhopal) Students won the first prize in the Design for Park Competition of Bhupal Smart City Development Corporation Ltd."
- Pradhan Mantri Awas Yojana-Housing for All (Urban) (SPA-B has a MoU with MohUPA, Govt. of India under Technology Sub Mission of Housing for All. Under this, currently a research and consultancy project on designing of alternative housing typology in the geo climatic zone comprising of Madhya Pradesh, Chhattisgarh and in land Maheshwara is being undertaken)
- Deendayal Antyodaya Yojana (DAY)-National Urban Livelihood Mission (NULM)
- National Urban Health Mission (NUHM)
- Shyama Prasad Mukherji Rugan Mission (SPMRM)
- Any other (Please specify)

Our Faculty is on various committees and expert groups set up by MOUD, MHUPA and State Governments for urban missions. Faculty has published papers on urban missions, programs and projects. Our students take up class projects and thesis that cover many of above missions. We are consultants for SPMRM for Rajasthan, UP, Haryana and Kerala.

- Shyama Prasad Mukherji Rugan Mission (SPMRM)
- Swachh Bharat (Awareness campaign in nearby villages of our school and waste collection drive has been periodically observed by the students, staff and faculty of our school) Design Innovation Centre focuses on Start up.
- Smart Cities (SPA, Bhopal) Students won the first prize in the Design for Park Competition of Bhupal Smart City Development Corporation Ltd.)
- Pradhan Mantri Awas Yojana-Housing for All (Urban) (SPA-B has a MoU with MohUPA, Govt. of India under Technology Sub Mission of Housing for All. Under this, currently a research and consultancy project on designing of alternative housing typology in the geo climatic zone comprising of Madhya Pradesh, Chhattisgarh and in land Maheshwara is being undertaken)
- Deendayal Antyodaya Yojana (DAY)-National Urban Livelihood Mission (NULM)
- National Urban Health Mission (NUHM)
- Shyama Prasad Mukherji Rugan Mission (SPMRM)
- Any other (Please specify)

Our department is directly involved with Swachh Bharat (Urban), Smart Cities, Atal Mission for Rejuvenation and Urban Transformation (AMRUT)

- National Heritage City Development and Augmentation Yojana (HRIDAY)
- Pradhan Mantri Awas Yojana-Housing for All (Urban)
- Deendayal Antyodaya Yojana (DAY)-National Urban Livelihood Mission (NULM)
- Shyama Prasad Mukherji Rugan Mission (SPMRM)

The institute already have centres for technology and business incubation. It also supports start up initiative with opportunity, finance and in kind support.
Restructuring of the Planning Course is the first

Is your Institution a part of any

LOW

AT

Twenty

Not mentioned

NA

AB

What should be the ideal postgraduate

• IIT-KGP

RECOMMENDATIONS FOR AN IMPROVED MASTER’S LEVEL URBAN PLANNING CURRICULA

• SPA Delhi organised curtain

network

international planning discourse? If yes,

International Symposium

organised by National Disaster

Management Authority that

focused on Sendai Framework

Conference related with urban

development

• Addis Ababa Action Agenda on

Urban Development under the New Urban

Agreement

• BRICS Goa Declaration (Oct 2016)

(Dec 2015)

• Through taking up live case studies

at community level, our

studio exercise on Local Area Planning

could help promote planned development

with schemes like Unnat

NSS for betterment and

Currently, NSS, IIT Roorkee

exercises with students leading
to ideas of planned development.

b. At the academic level:

• Undertaking rural appreciation and

work related to their current needs

• Liasoning with ULBs of the region in

Kharagpur and prepare a

c. At the executive level:

• Regular updating of international covenants

• Acquaintance of various statutes governing

urban affairs. Apex Court interpretation of

the clauses of various urban statutes and

its verdict thereof

• Examining the implementation of Master /

Policy analysis

• Adequate emphasis to the analysis of urban

themes mentioned question no

1. Urban management

2. Urban finance

4. Policy analysis

5. City plan preparation and evaluation

6. Community Planning

7. Climate Change and Disaster Risk

& RS

• Behaviour& Planning

• Governance

• Urban planning law

Any other number, please specify

• Ten

• Thirty

Any other number, please specify

• Through taking up live case studies

at community level, our

studio exercise on Local Area Planning

could help promote planned development

with schemes like Unnat

NSS for betterment and

Currently, NSS, IIT Roorkee

exercises with students leading
to ideas of planned development.

b. At the academic level:

• Undertaking rural appreciation and

work related to their current needs

• Liasoning with ULBs of the region in

Kharagpur and prepare a

c. At the executive level:

• Regular updating of international covenants

• Acquaintance of various statutes governing

urban affairs. Apex Court interpretation of

the clauses of various urban statutes and

its verdict thereof

• Examining the implementation of Master /

Policy analysis

• Adequate emphasis to the analysis of urban

themes mentioned question no

1. Urban management

2. Urban finance

4. Policy analysis

5. City plan preparation and evaluation

6. Community Planning

7. Climate Change and Disaster Risk

& RS

• Behaviour& Planning

• Governance

• Urban planning law

Any other number, please specify

• Ten

• Thirty

Any other number, please specify
### Question 8: Do you think restructuring of the existing urban planning programme could produce more skilled planners to effectively meet urban challenges? Please elaborate.

We are preparing future planners that will work with national, state and local government agencies, research agencies, consultants; international organizations; academic institutions; NGOs, etc. There cannot be one size fit all for future planners. We provide basic skills so that they could work on policy, programs and projects. We have recently introduced technical skills mapping and analysis. We need to further improve financial analysis and governance issues.

### Question 9: Does your School/Institution have a system to collect periodic feedback from your alumni/stakeholders on the skills and competencies required in their respective systems? Please elaborate.

We have an informal method of collecting feedback from alumni and experts from the people in profession. Yes, but this is restricted to feedback on faculty and not on courses and its relevance to current urban scenario in the country.

### Question 10: If you think an improved and new planning programme (s) in any of the above streams could produce planners with improved skills to meet urban challenges, please tick as many as necessary. Also please prioritize them by placing numbers, starting with 1 for the most significant programme.

1. Urban management
2. Urban finance
3. Urban planning law
4. Policy analysis
5. City plan preparation and evaluation
6. Community Planning
7. Climate Change and Disaster Risk Reduction
8. Strategic Planning
9. Behaviour Planning
10. Urban Economics, Spatial Statistics and GIS & RS
11. Economy
12. Urban design and place making
13. Urban infrastructure & services
14. Urban ecology & environment
15. Governance
16. Land management, housing - real estate & settlement

### Question 11: In your view, how should we fund new urban planning programmes?

Combination of government, private sector partnership and student fees.

- Through government funding
- Through private sector funding
- Funds raised through public-private partnerships
- Loans from government banks
- Self-sustaining programmes funded through student fees
- Any other method or a combination, please specify

### Question 12: What should be the ideal postgraduate planning class size (student intake) of a city planning programme?

Thirty

- Twenty
- Thirty
- Forty

Any other number, please specify

### Planning Curriculum in India

The department systematically and regularly reviews its curriculum based on the opinion of faculty members (both from academic and actual) on-site, practitioners, and members from nodal agencies. It keeps the syllabus pragmatic and contextual.

Planning curriculum in India not only restructuring but also requires proper juxtaposition between academics and professionals. Research is almost absent in the field of urban planning. There is almost no funding for urban planning related research, which is hugely dominated by engineering and technology. And it did not yield much benefit for making sustainable built environment in past seventy years. The faster the government acknowledges the need for more research funding in urban planning and themes mentioned question no 1 & 3, the better for the country’s development.

### Table: Recommendations for an Improved Masters Level Urban Planning Curricula

|---------------------|-----------------|----------------------|------------------|-------------------------------|-------------------|---------------------------------|-------------------|------------------|------------------------------------------|

- All of the above mentioned streams are incorporated within the existing curriculum of the Master of City Planning program offered by IIT Kharagpur. A separate program addressing the above issues is not needed.

- Through government funding
- Through private sector funding
- Funds raised through public-private partnerships
- Loans from government banks
- Any other method or a combination, please specify

### Table: Class Size

<table>
<thead>
<tr>
<th>Class Size</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thirty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twenty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thirty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Sixteen

* Text in red are the additional points made apart from given options.
<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>SPA-D</th>
<th>SPA-B</th>
<th>SPA-V</th>
<th>ITF-KGP</th>
<th>IIT-R</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 What kinds of jobs become available to urban planning graduates of your</td>
<td>Communication Skills</td>
<td>Communication Skills</td>
<td>Communication Skills</td>
<td>Communication Skills</td>
<td>Communication Skills</td>
</tr>
<tr>
<td>institution?</td>
<td>Group work</td>
<td>Negotiation</td>
<td>Group work</td>
<td>Negotiation</td>
<td>Group work</td>
</tr>
<tr>
<td></td>
<td>Negotiation</td>
<td>Visualisation skills</td>
<td>Negotiation</td>
<td>Visualisation skills</td>
<td>Visualisation skills</td>
</tr>
<tr>
<td></td>
<td>without the help of GIS</td>
<td>with or without the help of GIS and remote sensing</td>
<td>with or without the help of GIS and remote sensing</td>
<td>with or without the help of GIS and remote sensing</td>
<td>with or without the help of GIS and remote sensing</td>
</tr>
<tr>
<td></td>
<td>Policy framing, analysis</td>
<td>Policy planning, analysis and implementation</td>
<td>Policy framing, analysis and implementation</td>
<td>Policy framing, analysis and implementation</td>
<td>Policy framing, analysis and implementation</td>
</tr>
<tr>
<td></td>
<td>and implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 town planning cadre is there at state government levels?</td>
<td>Real estate</td>
<td>Real estate</td>
<td>Real estate</td>
<td>Real estate</td>
<td>Real estate</td>
</tr>
<tr>
<td></td>
<td>Research Institutions</td>
<td>Research Institutions</td>
<td>Research Institutions</td>
<td>Research Institutions</td>
<td>Research Institutions</td>
</tr>
<tr>
<td></td>
<td>Smart cities or other missions' related jobs</td>
<td>Smart cities or other missions' related jobs</td>
<td>Smart cities or other missions' related jobs</td>
<td>Smart cities or other missions' related jobs</td>
<td>Smart cities or other missions' related jobs</td>
</tr>
<tr>
<td></td>
<td>Planning job in a government office</td>
<td>Planning job in a government office</td>
<td>Planning job in a government office</td>
<td>Planning job in a government office</td>
<td>Planning job in a government office</td>
</tr>
<tr>
<td></td>
<td>(development authority, urban local government, state government, slum board, etc.)</td>
<td>(development authority, urban local government, state government, slum board, etc.)</td>
<td>(development authority, urban local government, state government, slum board, etc.)</td>
<td>(development authority, urban local government, state government, slum board, etc.)</td>
<td>(development authority, urban local government, state government, slum board, etc.)</td>
</tr>
<tr>
<td></td>
<td>Planning job with an NGO, CBO, INGO, etc.</td>
<td>Planning job with an NGO, CBO, INGO, etc.</td>
<td>Planning job with an NGO, CBO, INGO, etc.</td>
<td>Planning job with an NGO, CBO, INGO, etc.</td>
<td>Planning job with an NGO, CBO, INGO, etc.</td>
</tr>
<tr>
<td></td>
<td>Non planning job with an NGO, CBO, INGO, etc.</td>
<td>Non planning job with an NGO, CBO, INGO, etc.</td>
<td>Non planning job with an NGO, CBO, INGO, etc.</td>
<td>Non planning job with an NGO, CBO, INGO, etc.</td>
<td>Non planning job with an NGO, CBO, INGO, etc.</td>
</tr>
<tr>
<td></td>
<td>Any other or a combination, please specify</td>
<td>Any other or a combination, please specify</td>
<td>Any other or a combination, please specify</td>
<td>Any other or a combination, please specify</td>
<td>Any other or a combination, please specify</td>
</tr>
<tr>
<td>15 After globalization of the Indian economy, Indian cities need to be</td>
<td>Town planning cadre is there at state government levels.</td>
<td>Yes, India requires urban planning cadre is there at state government levels.</td>
<td>Yes, it is high time that we have a dedicated cadre (Indian Urban Affairs Service) to look after urban affairs given the enormous complexities in all three spheres of urban affairs, - urban planning, urban development and urban management</td>
<td>Yes, Planning process at every scale (sub-city or city or regional) requires careful scientific analysis of present trends, simulation of future requirements, and strategizing through scenario building on aspects like land, water, and other built resources. It is a recognised stream of education across the globe. The outputs of these exercises have large implications on municipal district budget, administration and strategies of growth. Bureaucrats and designated cadres of planning at all India level give the adequate training and exposure to administer and execute. This dedicated technical cadre is missing and would be highly imperative. Such skill upgradation could be had through periodic training programme. Such training programme should be demand driven and not a mere periodic ritual</td>
<td>Yes, Planning process at every scale (sub-city or city or regional) requires careful scientific analysis of present trends, simulation of future requirements, and strategizing through scenario building on aspects like land, water, and other built resources. It is a recognised stream of education across the globe. The outputs of these exercises have large implications on municipal district budget, administration and strategies of growth. Bureaucrats and designated cadres of planning at all India level give the adequate training and exposure to administer and execute. This dedicated technical cadre is missing and would be highly imperative. Such skill upgradation could be had through periodic training programme. Such training programme should be demand driven and not a mere periodic ritual</td>
</tr>
<tr>
<td>How do you view the need for skill upgradation for planners periodically in their career?</td>
<td>Considering the fast changing urban scenario, planners need to be trained every five years, especially in policy analysis, programmes and its implementation.</td>
<td>Considering the fast changing urban scenario, planners need to be trained every five years, especially in policy analysis, programmes and its implementation.</td>
<td>Considering the fast changing urban scenario, planners need to be trained every five years, especially in policy analysis, programmes and its implementation.</td>
<td>Considering the fast changing urban scenario, planners need to be trained every five years, especially in policy analysis, programmes and its implementation.</td>
<td>Considering the fast changing urban scenario, planners need to be trained every five years, especially in policy analysis, programmes and its implementation.</td>
</tr>
</tbody>
</table>

The last two options i.e. Policy framing and Visualisation Skills cannot be framed as 'soft skills'. These are hard core technical aspects of the curriculum. However, we felt that public speaking and mind mapping could have been incorporated in the options.
<table>
<thead>
<tr>
<th>Page</th>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>How is your institution embedding new multidisciplinary research such as use of smart sensors, open data and big data in urban planning curriculum?</td>
<td>This is being introduced at studio level projects. We are procuring different equipments (expected to be delivered soon) to measure different environment related variables. Our studio / dissertation exercise do use open data source (census, NSSO, other secondary sources, open street map, NOAA, NASA, Bhuvan and Google earth) Use of big data is not being proposed for the time being. However, we had lectures on use of big data by Professor from US University under the GIAN of MoHRD Govt. of India in our school.</td>
</tr>
<tr>
<td>18</td>
<td>In your opinion, what is the reason for urban planning to be a low impact profession in India?</td>
<td>Difficult to say</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The reason lies in the failure of urban planners to appreciate urban problems from different perspectives. The Master Development Plans used to be excessively stereotyped with solitarily recommendation on land use and zoning. It hardly used to study urban services, housing, transportation, informal settlement, informal economy in detail. This vacuum got filled in by bureaucracy which roped in experts from various field to address urban problems and suggest the ways out. It is high time planning profession gets resurrected. For this to happen, government must recognise the indispensability of planners and planners must realise that planning is beyond appreciating the spatial attributes of a place. The economics, geography, history, sociology, environment, energy and finance are equally important to comprehend an urban settlement.</td>
</tr>
<tr>
<td>19</td>
<td>Do you think it is useful to have the National Planning Education Policy?</td>
<td>There should be a first spatial planning policy. Indeed such policy is long overdue. Yes It would not be very effective, unless there is an umbrella under which not only planners but also the entire planning community (economic-planners, geography-planners, statisticians, etc.) would be accommodated. However, the ill-executed example of Council of Architecture needs to be kept in mind while framing such a framework. ITPI has to take initiative to find out the latest developments in the planning profession and how help planners shape the course of planning by providing safer and healthier communities, a better commute, greater choice of housing, and places of lasting value. The role of AITP and ITPI can be studied for better comprehension. Academically yes but practically difficult.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recruitment rules used by many state PSCs, SSC, UPSC and ULBs and UDA still do recognize many qualified planners (due to non-updation of lists, etc.) This reduces the value and absorption of qualified planners. This is one of the most serious issue. Lack of any spatial planning stream as a subject choice in UPSC or SPSC exams.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The reasons for the poor plight of planning profession in India is summarised below a. More comprehensive role to be played by ITPI to promote the general interests of those engaged in the practice in town and country planning and also foster the teaching of subjects related to town and country planning and assist in providing such teaching.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Lack of legal recognition of the nodal agency for Town Planning in India i.e. ITPI</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Low remuneration of planners and lesser recognition within the government hierarchy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Strong intervention from the political 'bosses'</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. Planners not involved in planning policy or decision making, in the corporate managers (with MBA degrees) replacing planners. Moreover, many of the government schemes (Smart Cities Mission or AMRUT or HRIDAY) are conducted by private agencies which hire managers rather than planners</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Text in *red* are the additional points made apart from given options.