

CURRICULUM
OF
CITY & REGIONAL PLANNING
MS

(Revised 2017)



HIGHER EDUCATION COMMISSION
ISLAMABAD

CURRICULUM DIVISION, HEC

Prof. Dr. Mukhtar Ahmed	Chairman, HEC Executive
Prof. Dr. Arshad Ali	Director, HEC Director General
Mr. Muhammad Raza Chohan	(Academics) Director
Dr. Muhammad Idrees	(Curriculum) Assistant Director
Mr. Riaz-ul-Haque	(Curriculum) Assistant Director
Mr. Muhammad Faisal Khan	(Curriculum)

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PREFACE

The curriculum, with varying definitions, is said to be a plan of the teaching-learning process that students of an academic programme are required to undergo. It includes objectives & learning outcomes, course contents, scheme of studies, teaching methodologies and methods of assessment of learning. Since knowledge in all disciplines and fields is expanding at a fast pace and new disciplines are also emerging; it is imperative that curricula be developed and revised accordingly.

University Grants Commission (UGC) was designated as the competent authority to develop, review and revise curricula beyond Class-XII vide Section 3, Sub-Section 2 (ii), Act of Parliament No. X of 1976 titled "Supervision of Curricula and Textbooks and Maintenance of Standard of Education". With the repeal of UGC Act, the same function was assigned to the Higher Education Commission (HEC) under its Ordinance of 2002, Section 10, Sub-Section 1 (v).

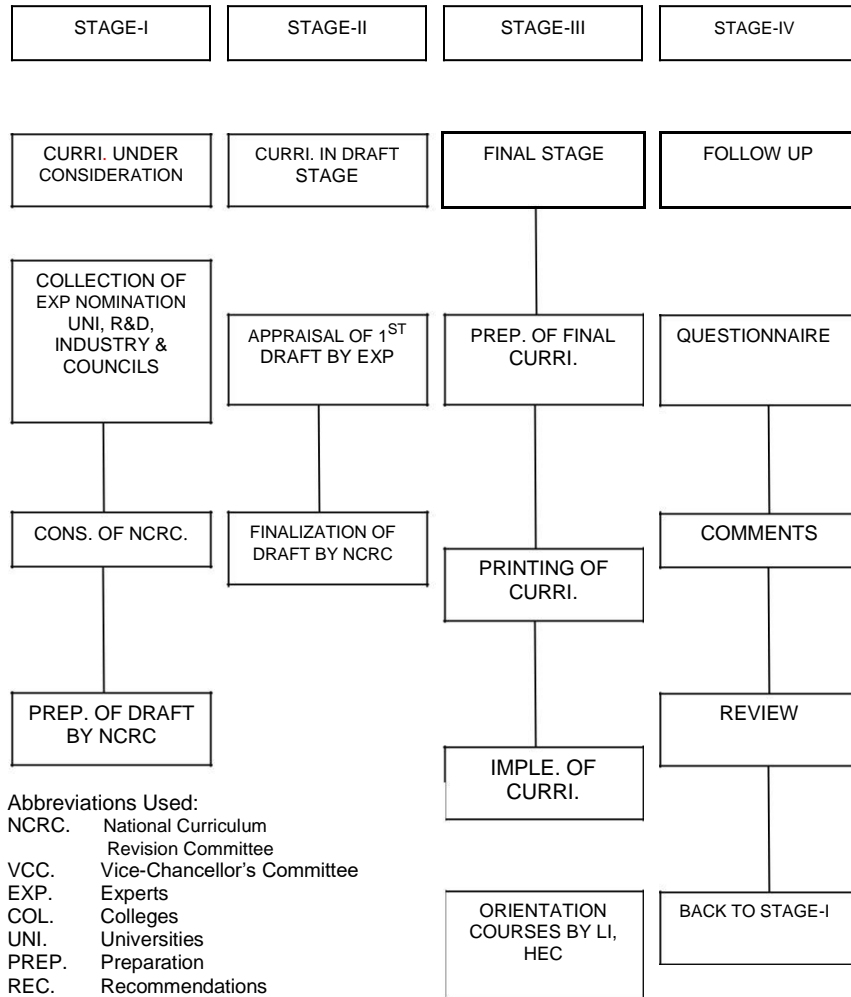
In compliance with the above provisions, the Curriculum Division of HEC undertakes the revision of curricula after every three years through respective National Curriculum Revision Committees (NCRCs) which consist of eminent professors and researchers of relevant fields from public and private sector universities, R&D organizations, councils, industry and civil society by seeking nominations from their organizations.

In order to impart quality education which is at par with international standards, HEC NCRCs have developed unified templates as guidelines for the development and revision of curricula in the disciplines of Basic Sciences, Applied Sciences, Social Sciences, Agriculture and Engineering in 2007 and 2009.

It is hoped that this curriculum document, prepared by the respective NCRC's, would serve the purpose of meeting our national, social and economic needs, and it would also provide the level of competency specified in Pakistan Qualification Framework to make it compatible with international educational standards. The curriculum is also placed on the website of HEC
<http://hec.gov.pk/english/services/universities/RevisedCurricula/Pages/default.aspx>

(Muhammad Raza Chohan)
Director General (Acad.)

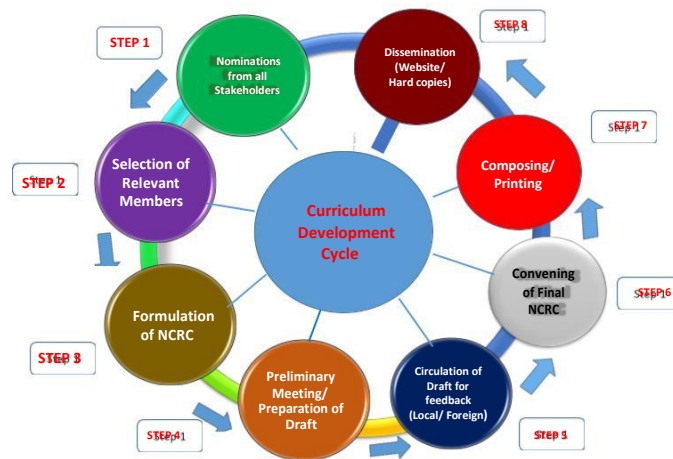
CURRICULUM DEVELOPMENT PROCESS



Abbreviations Used:

- NCRC. National Curriculum Revision Committee
- VCC. Vice-Chancellor's Committee
- EXP. Experts
- COL. Colleges
- UNI. Universities
- PREP. Preparation
- REC. Recommendations
- LI Learning Innovation
- R&D Research & Development Organization
- HEC Higher Education Commission

CURRICULUM DEVELOPMENT CYCLE



INTRODUCTION

The final meeting of National Curriculum Revision Committee (NCRC) in the discipline of City and Regional Planning (CRP) for BS & MS Programs was held from March 20-22, 2017 at Higher Education Commission (HEC), Regional Centre, Lahore. Earlier, a preliminary meeting was held from November 15-17, 2016 at the same venue. Experts from academia, industry, practicing town planners as well as entrepreneurs participated in the meeting. HEC representation was ensured by Dr. Muhammad Idrees (Director, Academics Division, HEC, Pakistan). The list of members who participated in the meetings is as below:

S.N	Name & Institution	Position	Preliminary Meeting	Final Meeting
1	Dr. Rizwan Hameed Professor/Chairman, Department of City & Regional Planning, University of Engineering & Technology, Lahore.	Convener	Present	Present
2	Mr. Mubushar Hussain General Manager (Urban Planning), Osmani & Company (Pvt) Ltd Karachi	Secretary	Present	Present
3	Meritorious Professor Amir Khan Ex-Director (Rtd), Institute of Geography, Urban & Regional Planning, University of Peshawar, Peshawar.	Member	Present	Present
4	Dr. Mohammad Atiq ur Rahman Professor/Head of Department, Department of City & Regional Planning, Lahore College for Women University (LCWU), Lahore.	Member	Present	Present
5	Ms. Fariha Amjad Ubaid Associate Professor, Department of	Member	Present	Present

	Architecture & Planning, NED University of Engineering & Technology, City Campus, Karachi.			
6	Ar./Plnr.T. Sadia Fazli Pakistan Council of Architects & Town Planners, 61-C, 4th Floor, 21st Commercial Street, Phase-II Extension, D.H.A, Karachi	Member	-	Present
7	Dr. Imtiaz Ahmed Chandio Associate Professor/Chairman, Department of City & Regional Planning, Mehran University of Engineering & Technology, Jamshoro, Sindh	Member	Present	Sent regrets
8	Dr. Mir Aftab Hussain Talpur Assistant Professor, Department of City & Regional Planning, Mehran University of Engineering & Technology, Jamshoro, Sindh	Member	Present	Sent regrets
9	Dr. Malik Asghar Naeem Assistant Professor/Head of Department, Department of Urban & Regional Planning, National University of Science & Technology, Islamabad.	Member	Present	Present
10	Dr. Akhtar Ali Shah Chairman, Department of Urban & Regional Planning	Member	-	Present

	University of Peshawar, Peshawar (Attended first day of the meeting)			
11	Dr. Muhammad Haroon Siddique Assistant Professor, Department of Architecture, NFC Institute of Engineering & Technology, Multan.	Member	Present	Sent regrets
12	Dr. Fariha Tariq Assistant Professor, School of Architecture & Planning, University of Management & Technology, Lahore.	Member	Present	Present
13	Mr. Mutahir Mehmood Awan Assistant Professor, School of Architecture & Planning, University of Management and Technology, Lahore.	Member	Present	Present
14	Mr. Muhammad Sohail Assistant Professor, Department of Architecture, BUIITEMS, Quetta.	Member	Present	Sent regrets
15	Mr. Khurram Farid Bargatt General Secretary, Institute of Planners Pakistan (IPP) Managing Director, SheherSaaz (Pvt) Ltd, Lahore	Member	Present	Present
16	Dr. Muhammad Idrees Director, Academics Division, Higher Education Commission, Islamabad	Coordinat or	Present	Present

NCRC Agenda

The agenda of NCRC for City and Regional Planning was as follows:

1. To revise/update the draft curriculum in the discipline of City and Regional Planning (BS & MS Programs) according to indigenous needs and to bring it at par with international standards.
2. To revise/update preface, mission, vision, preamble, and rationale of the subject.
3. To develop and revise objectives/learning outcomes, list of contents and assessment criteria (formative & summative) and align these with undergraduate programs (vertical approach) and other MS programs (horizontal approach).
4. To incorporate/suggest latest reading materials/references (local & international) for every course.
5. To revise/update course contents keeping in view the uniformity across other disciplines and avoiding overlapping.
6. To make recommendations for promotion/development of the discipline, keeping in view the futuristic needs of the society and international trends.

The preliminary meeting started with recitation from the Holy Quran. Mr. Muhammad Raza Chohan, Director General, Academics Division, HEC, Islamabad welcomed the participants. All the participants introduced themselves highlighting their qualification, experience and area of expertise. Keeping with the tradition, Dr. Muhammad Idrees, Director Academics Division, HEC, Islamabad offered the house to nominate the Convener and Secretary of the NCRC for smooth functioning. Prof. Dr. Rizwan Hameed, Chairman, Department of City & Regional Planning, University of Engineering & Technology, Lahore and Mr. Mubushar Hussain, General Manager (Urban Planning), Osmani & Company (Pvt) Ltd., Karachi were selected unanimously as Convener and Secretary respectively.

Dr. Muhammad Idrees presented the objectives of the NCRC. He highlighted the importance of this meeting and emphasized for adaptation of general rules of curriculum development and revision like scope of the subject/program, horizontal & vertical alignment, rule of flexibility and adaptability keeping in view the futuristic approach, market value/job market and societal needs. He also shared a template for revising/updating the curricula. The template was unanimously accepted to be followed. It was also agreed to add learning outcomes, teaching methodology and assessment segments in the curricula.

After thorough deliberation, the committee unanimously agreed on draft curriculum of the BS (4-year) and MS (2-year) City and Regional Planning degree programs. The draft was to be finalized in another meeting and keeping in view the comments from local and foreign experts in the field of city and regional planning as well as from NCRC members.

The final meeting again held at HEC Regional Centre at Lahore and started with recitation from the Holy Quran. Dr. Muhammad Idrees, Director, Academics Division, HEC, Islamabad again welcomed and refreshed the participant, particularly those attending the NCRC meeting for the first time, about the objectives of the NCRC. He highlighted the importance of this meeting and emphasized for adaptation of general rules of curriculum development and revision like scope of the subject / program, horizontal and vertical alignment, rule of flexibility and adaptability keeping in view the futuristic approach, market value / job market and societal needs.

After thorough deliberation, the committee unanimously agreed on the final draft curriculum of the BS (4-year) and MS (2-year) City and Regional Planning degree programs. This final draft would be shared with three foreign experts agreed with HEC for their input for review and further refinement.

In the end, Dr. Idrees thanked the Convener, Secretary and all members of the Committee for sparing their time and for their contribution to prepare the final draft of the curriculum. He further stated that their efforts will go a long way in developing workable, useful and market oriented comprehensive degree programs in City and Regional Planning. Prof. Dr. Rizwan, Convener of the NCRC, also thanked Dr. Idrees as well as the Secretary and all the members of NCRC for their inputs and valuable suggestions in revising / updating the City and Regional Planning curriculum to make it more practical, competitive, efficient and realistic. The committee highly appreciated the efforts made by the officials of HEC Regional Centre, Lahore for making arrangements to facilitate the committee and their accommodation at Lahore. The meeting ended with the vote of thanks to Dr. Idrees and his team from HEC for providing an ideal environment to complete the given agenda.

PART-II MS PROGRAM (2-YEAR) IN CITY AND REGIONAL PLANNING

OBJECTIVES

Following are the main objectives of the MS-CRP program:

1. To inculcate advanced knowledge and skills in the field of City and Regional Planning to meet the challenges of the contemporary and future epochs within our context.
2. To conduct research in order to contribute to the existing body of knowledge, skills and techniques in City and Regional Planning profession.
3. To augment professionals in various stream of specializations in City and Regional Planning.
4. To equip the CRP professionals with Climate Change adaptability and Disaster Risk Management concepts and techniques enhancing their role in achieving sustainable development in the country.
5. To develop entrepreneurial skills and advanced knowledge to the CRP graduates so that they can pursue career in development sectors at national and international levels.
6. To elevate the City and Regional Planning professionals to international standards.

6. SCHEME OF STUDIES FOR MS CITY & REGIONAL PLANNING

SPECIALIZATIONS

- | | | |
|-----|------------------------------------|-------|
| 1. | Community Empowerment | (CE) |
| 2. | Housing | (HS) |
| 3. | Urban Development Planning | (UD) |
| 4. | Regional Development Planning | (RP) |
| 5. | Transportation Planning | (TP) |
| 6. | Disaster Management | (DM) |
| 7. | Environmental Planning | (EP) |
| 8. | Land Use and Land Management | (LU) |
| 9. | Sustainable Development | (SD) |
| 10. | Urban Conservation | (UC) |
| 11. | Infrastructure Planning and Design | (IP) |
| 12. | Sustainable Tourism Planning | (STP) |
| 13. | Social Engineering | (SE) |
| 14. | Disability and Development | (DD) |
| 15. | Land Administration | (LA) |

Note: *University/Institution may introduce new or exclude existing specialization as per the needs.*

GROUP-A: Compulsory Courses

Compulsory for all			
Advanced Research Methods	2	1	3
Research Thesis	0	6	6

GROUP-B: Core Courses (Three Courses to be selected from the following)

SN	Course Title	Credit Hours	
		Theory	Practical
1.	Advance Planning Techniques	2	1
2.	Comparative Urban Planning	3	0
3.	Planning Law and Practice	3	0
4.	Regional Development Planning	3	0
5.	Advanced Planning Theory	3	0
6.	Housing Policy and Practice	3	0
7.	Social Engineering	2	1
8.	Advanced Professional Practice		
9.	Environmental Planning	3	0
10.	Integrated Transportation Planning	3	0
11.	Implementation of policies and plans	2	1
12.	Urban Land Management	3	0
13.	Public Policy Analysis	3	0
14.	Sustainable Urban Land use Planning	3	0

GROUP-C: Elective Courses (Four Courses to be taken from the following)

SN	Course Title	Credit Hours	
		Theory	Practical
1.	Public Transport Planning	3	0
2.	Community Based Disaster Risk Management (CBDRM)	3	0
3.	Development Planning in Pakistan	3	0
4.	Disaster Resilience Recovery and Rehabilitation	3	0
5.	Local Planning Practice	2	1
6.	Environment, Resources and Development	3	0
7.	Legal and Regulatory Aspects in Planning	3	0
8.	Urban Finance Management	3	0
9.	Advanced Statistics	2	1

10.	Advanced Remote Sensing	2	1
11.	Rural Planning	3	0
12.	Advanced Geographical Information Systems	2	1
13.	Mathematical Models in Planning	2	1
14.	Urban Sociology	3	0
15.	Slum and Informal Housing	3	0
16.	Environmental Impact Assessment (EIA)	2	1
17.	Social Impact Assessment (SIA)	3	0
18.	Community Organization and Development	3	0
19.	Strategic Environmental Assessment	3	0
20.	Housing and Urban Development	3	0
21.	Advanced Urban Design	3	0
22.	Urbanism	3	0
23.	Industrial pollution regulation	3	0
24.	Project Appraisal	2	1
25.	Infrastructure development	3	0
26.	Climate Consideration in Urban Design	2	1
27.	Participatory approaches to waste management	3	0
28.	Urban Governance	3	0
29.	Urban Renewal and redevelopment	3	0
30.	Development Policies	3	0
31.	Negotiation and Conflict Resolution	3	0
32.	Energy Planning and Management	3	0
33.	Gender and Development	3	0
34.	Disaster and Development	3	0
35.	Monitoring and Auditing Urban Development	3	0
36.	Techniques for Damage and Need Assessment	2	1
37.	Transport and the Environment	3	0
38.	Guided individual studies in Urban & Regional Planning	3	0
39.	Climate change impacts and Adaptation	3	0
40.	Poverty Alleviation	3	0
41.	Urban Economics	3	0
42.	Sustainable Tourism Planning	3	0
43.	Urban Planning Studio	0	3
44.	Inclusive Development	3	0

45.	Urban Security and Terrorism	3	0
46.	Smart Cities	3	0
47.	Affordable Housing	3	0
48.	Energy Efficient Housing	3	0
49.	Urban Landscape	2	1
50.	Decision Support System	3	0
51.	Environmental Economics	3	0
52.	Industrial Development Planning	3	0
53.	Advanced Active Citizenship	3	0
54.	Corporate Social Responsibility	3	0
55.	Water Sanitation and Hygiene	2	1
56.	Migration Studies	3	0
57.	Heritage Conservation	3	0
58.	Access Auditing for Person with Disabilities	3	0
59.	Land Administration	3	0
60.	Healthy Cities	3	0
61.	Special Topics (to be selected by the university)	3	

Total Credit Hours for the MS-CRP Degree = 30

SPECIAL TOPICS

Students may study the topics of interest related to their research individually. However, the topics must be approved by the faculty supervisor / board of study prior to registration for this course.

RESEARCH THESIS

The thesis proposal shall be prepared by the students during the First Semester as a part of sessional work in the compulsory subject of Research Methods. The proposal may be considered by the Post Graduate Research Committee/Board of Studies during the first month of the Second Semester. The students are expected to work on data collection and literature review during the second Semester in their spare time. However, in the Final Semester, the students shall be required to concentrate wholly on their research thesis. A time table (weekly schedule) for the thesis may be prepared which will show two meeting days per week with the concerned supervisor. Other meetings may be arranged according to mutually agreed time between the supervisor and the supervisee. Full time students are strongly advised to submit their thesis at the end of the final semester.

7. RECOMMENDATIONS/SUGGESTIONS

The meeting made the following recommendations:

1. City and Regional Planning (CRP) should be included in the list of subjects/branches for all foreign and local MS/PhD scholarships awarded through HEC.
2. Special attention may be given to higher education in City and Regional Planning under HEC faculty development program.
3. In view of rapid urbanization and economic development, there is a need to rationalize/develop appropriate institutional framework for planning profession in the country.
4. In order to promote systematic city and regional planning in the country, it is recommended to develop planning legislation at federal and provincial levels to back up appropriate town planning system in Pakistan.
5. The profession of City and Regional Planning should be recognized at all levels so that a new cadre of technocrats be established at par with other professions.
6. Diploma and certificate courses in CRP may be introduced. This qualification must be made mandatory for building inspectors in local governments, development authorities and other relevant institutions.
7. HEC may facilitate Continuous Professional Development (CPD) program in collaboration with institutions like Pakistan Council of Architects and Town Planners (PCATP), Institute of Planners Pakistan (IPP), and International Society of City and Regional Planners (ISOCARP). Town planners working in the field may also be invited to join these programs to update their knowledge and keep themselves abreast with new technology.
8. BS in CRP degree may be initiated in all the provincial capitals and federal capital, particularly in Karachi, Quetta, Muzaffarabad, Gilgit and Islamabad to meet the dire need of this profession in the country.
9. Both the Pakistan Council of Architects and Town Planners (PCATP) and Institute of Planners Pakistan (IPP) should play active role in job creation for qualified town planners.
10. The criteria for admission in MS City and Regional Planning (CRP) must be BS CRP.

11. The faculty of Architecture and Planning should be independent in all public and private universities/institutions to facilitate accreditation of City and Regional Planning degree from PCATP. Moreover, the head of CRP Department should be from the same discipline.

10. Centre of Excellence in the field of City and Regional Planning may be established by academic institutions as well as public and private sector organizations.

11. Well-equipped GIS labs and urban planning studios at CRP departments may be established.

12. Departmental Libraries in existing CRP Departments may be strengthened. The PCATP may request HEC to include/enhance town planning related books, journals and data bases in Digital Library.

13. City and Regional Planning Departments should strive to launch research journals to encourage local publications and enhance local planning knowledge base. HEC may provide funds for this purpose.

14. To enhance the job market, non-planners working in the Government/Semi-government organizations, development authorities, TMAs (Tehsil/Town Municipal Administrations), Cantonment Boards etc. may be replaced by the qualified City and Regional Planners. Moreover, the capacity building of Local Government institutions should be done by provision of sufficient number of qualified City and Regional Planners in every TMA and District Governments throughout the country.

15. Any public or private organization while hiring town planners should clearly mention in the advertisement that applicants should have valid membership of PCATP

16. The NCRC recommends that all new programmes may be regularized following the accrediting authority's (PCATP) requirements.

17. All the faculty members of BS and MS programs currently being offered by public and private sector institutions must hold valid registration as town planners with PCATP.