

Curriculum Document
Urban and Regional Planning Study
Program
Master's Program



School of Architecture, Planning and
Policy Development
Bandung Institute of Technology
2024

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FOREWORD

The 2024 Curriculum Document for the Master of Urban and Urban Planning (PM-PWK) Study Program is an adjustment to the 2023 Curriculum, which will only be implemented in Semester II-2023/2024, with the Regulation of the Minister of Education, Culture, Research and Technology No. 53/2023 concerning National Standards for Higher Education. The lecture load, which was initially 36 credits to 54 credits, is equipped with ITB wajib content, adjustment of credits in courses including thesis, and more open opportunities for free and multidisciplinary elective courses.

It is hoped that with this new curriculum, students will get better experience and learning outcomes to be competitive at the national and international levels.

PM-PWK would like to thank the various *stakeholders* who supported this preparation including the Advisory Board, alumni and users.

Bandung, June 2024

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1 GENERAL DESCRIPTION

1.1 Identity of Study Program

College	: Bandung Institute of Technology
Faculties/Schools	: School of Architecture, Planning and Policy Development
Study Program	: Regional and Urban Planning
Accreditation	: BAN PT (Unggul)
Education Level	: Master (S-2)
Graduate Degree	: M.P.W.K.

1.2 Vision and Mission

Vision

To be an Inclusive, Adaptive, and Flexible institution in solving the nation's problems and achieving an international reputation.

The vision of SAPPK 2024 reflects "beyond boundaries" which is intended to make this vision easily remembered by the SAPPK ITB academic community, including students who are the millennial generation and also the largest stakeholders in SAPPK.

Mission

Create, share, and apply knowledge in the field of design, planning and development of built environmental policies, as well as producing superior human resources in this field to make Indonesia and the world better.

The mission is described in the SAPPK Objectives, as follows:

1. Realizing SAPPK as an institution that contributes to solving the nation's problems and achieving an international reputation in the implementation of education, research, and community service in the field of design, planning, and development of fostered environmental policies
2. Improve the ability to collaborate internally and externally in producing works that contribute to solving the nation's problems and achieving international reputation.
3. Develop a good governance system by utilizing technology and information systems.

1.3 Strategic Insights

Along with the development and dynamics of the times, the field of expertise and science of Regional and Urban Planning faces a number of major challenges in the next 10 years. These challenges are very important to be considered as a consideration, reference, and control in the profession and scientific development of Regional and Urban Planning.

Challenges in the scientific field of regional and urban planning can include global and national challenges. The various challenges, both global and national, faced by the field of Regional and Urban Planning are shown in Figure 1.1.



Figure 1.1 Challenges in the Scientific Field of Regional and Urban Planning

On the other hand, there are several problems in the MPWK curriculum that are considered not adaptive to the dynamics of national and global competition, including:

1. **The existing curriculum is not responsive to the job market and the demands of dynamic times.** The rapid development of technology and the influence of COVID-19 which requires all lines of society to be able to adapt to current conditions have encouraged high *demand* for solving problems that occur. Graduates with good adaptability are an essential need at this time. Readiness to be able to go down in the field immediately is highly demanded by employers. However, in reality, the MPWK ITB curriculum is still unable to respond to the demands of the job market and the development of the times.
2. **A rigid and inefficient curriculum slows graduation and hinders graduates' readiness to work as early as possible.** The number of *pre-requisite* MKs that are too binding causes the current MPWK ITB curriculum *to be rigid*. Coupled with the average course having a load of less than 3 credits so that each semester students can take 6 MKs. These two points are the reason why students consider the burden too heavy and difficult to accelerate graduation. In addition, courses that do not open opportunities for students to hone their skills and apply knowledge in the field are also factors that make it difficult for graduates to be able to work immediately.
3. **A less attractive and flexible curriculum is not able to cope with increasingly fierce national competition.** Compulsory courses for PM-PWK students are substantially *redundant* with courses in the Bachelor of Regional and Urban Planning Study Program. These courses are PL5102 Resources and Environment, PL 5106 Spatial Economics, and PL 5206 Transportation Institutions. This condition also causes difficulties in implementing '*advanced*' courses which should be the advantage of the master's level. These two reasons cause the majority of S1 PWK ITB graduates to not want to continue their studies at MPWK ITB. Competition with other national universities in Indonesia is getting more difficult because based on the results of questionnaires and FGDs with employers, the specialization of graduates of other universities is very visible.
4. **The curriculum needs to be adjusted to Permendikbudristek Number 53 of 2023 in the National Standards for Higher Education.** Some things that need to be adjusted are related to competencies and student load standards which are 54 credits.
5. **A rigid curriculum that is incompatible with global trends hinders international cooperation and is not attractive to foreign students, which has implications for the declining world ranking.** The collaboration program between SAPPK and International Universities requires adjustments to the curriculum structure which is currently still rigid with many eyes

pre-requisite lectures and in-depth context in cases in Indonesia, resulting in hampered cooperation agreements, especially when compared to the simpler and non-binding structure of partner curricula.

1.4 Scientific Map

Starting from the definition of "planning" as a continuous process that concerns the determination of the right alternative future actions through the maximum possible use of existing resources to achieve certain goals in the future, the purpose of Regional and Urban Planning education is essentially to produce regional and urban planners who are able to provide prescriptions that are considered effective and efficient in solving problems that are in the public interest (*public concern*). Based on its nature, problems in the field of regional and urban planning tend to be complex, where the substance of the problem concerns many dimensions, ranging from economic, socio-cultural, physical, environmental to political dimensions and involves many stakeholders which are often colored by conflicts of interest in the process). As an implication, the prescription for solving regional and city problems must be valid in terms of science, process, and procedure, and can be positioned properly and relevant according to the context of the problem by also considering the aspirations of all stakeholders involved (fulfilling the communicative process).

The field of expertise or profession of Regional and Urban Planning is a field of expertise or profession related to the formulation of alternative actions in a systematic, comprehensive and integrated manner in the public sphere by taking into account the needs and availability of resources to achieve the progress of regions and cities in the future. Thus, the content of knowledge in this field includes basic knowledge, expertise knowledge, and the synthesis of knowledge in Regional and Urban Planning.

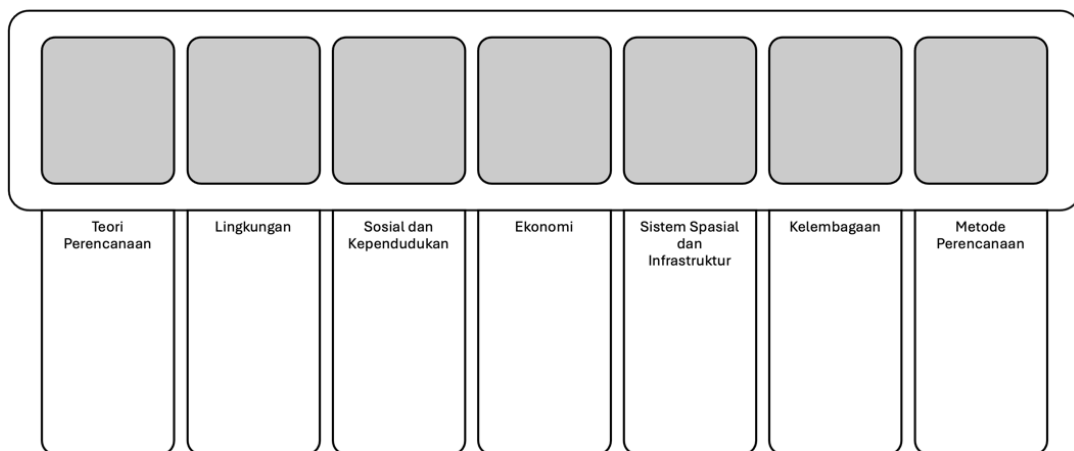


Figure 1.1 ITB Urban and Regional Planning Knowledge Bar

Contemporary Concepts, Theories and Principles in Planning. Regional and Urban Planning includes knowledge that is the foundation or starting point for understanding knowledge, expertise, and synthesis. The main knowledge is related to the theory of planning and sustainable development.

Knowledge and Skills in the Field of Planning Specialization. Regional and Urban Planning in the master program in regional and urban planning includes five main areas of knowledge that are classified according to the path of choice/specialization of expertise that students are interested in. These fields of knowledge that have been opened to date consist of:

1. Elective Path/Specialization in Urban Planning;

2. Regional Development Specialization Path;
3. Choice Path/Specialization of Infrastructure and Transportation System;
4. Elective Path/Specialization in Urban Governance;
5. Elective Path/Specialization in Disaster Management Planning;
6. Choice/Specialization Pathway for Innovation Systems and Smart Cities;

Planning Research. Expertise knowledge provides mastery in Engineering and Methodology to take part in the field or expertise of Regional and Urban Planning. These skills consist of two skills, namely skills in the planning process and skills in mastering supporting techniques that are more specific in accordance with the choice / specialization path that students are interested in, which are described as follows:

1. Planning Process Skills, including:
 - Collecting quantitative and qualitative data;
 - Analyze quantitative and qualitative data;
 - Identifying, structuring, and formulating problems;
 - Creating a synthesis;
 - Applying knowledge into action;
 - Solve problems collaboratively;
 - Prepare program plans and designs;
2. Supporting Engineering Mastery Skills, including:
 - Mastering information and communication technology;
 - Communicate ideas in writing, verbally, and graphically.

In addition to mastering basic knowledge and expertise knowledge, graduates of the Master of Regional and Urban Planning are required to be able to synthesize knowledge of regional and urban planning. Thus, in addition to mastering Engineering and Methodology, the field of expertise and profession of Regional and Urban Planning typically requires a planner to synthesize his or her understanding in the field of regional and urban planning to act as follows:

- Basing decision-making on fair and universal values, which include equality, justice, welfare as well as efficiency and effectiveness;
- Paying attention to the role of the government and other actors, participation, diversity of views, and ideologies;
- Pay attention to the preservation of the environment, social and cultural heritage;
- Uphold professional ethics.

The field of expertise and profession of Regional and Urban Planning is required to have main characteristics that include all elements both technical and conceptual, as follows:

- Realizing a harmonious inter-relationship between populations–activities–spaces (*Geddes paradigm*). Residents with their activities are content that must be placed appropriately in the space as a container (*context*). Space is a vehicle for various activities to meet public and private interests. The space has a two-dimensional scale (e.g. land use) or three-dimensional (above-ground and underground) space.
- Confronting a complex and uncertain arena that encompasses the multi-dimensional character of the substance of the problem (including political and institutional dimensions) and the procedural needs of its planning and implementation.
- Future-oriented. The ability to predict the future visionarily in addition to *the ability to forecast*, projective, and predictive as the basis for making prescriptions. Prescription in this case can be defined as:
 - The ability to synthesize interventions for future improvements.
 - Ability to develop strategies, policies, programs and activities. This is related to the understanding that *planning as craft or as design*.

- Orientation to the future is pursued by utilizing lessons learned from the past. Although forward-oriented, planning also does not ignore the need to manage the problems that occur now.
- Strive to generate synergy between technocratic approaches and collaborative approaches. This will result in a more implementable plan due to the support of *stakeholders*.
- Action-oriented. This is intended so that the synthesis of knowledge about the harmonious relationship of population-activities-space can be practiced/implemented in the existing political and institutional contexts

With the opening of the Regional and Urban Planning Study Program at the bachelor's, master's, and doctoral levels, it is necessary to differentiate between levels. This difference lies in the mastery of the elements of knowledge shown in the following Table 1.1.

In addition to referring to the characteristics of the knowledge element, the difference in the proportion of substance in the Bachelor's, Master's, and Doctoral programs in Regional and Urban Planning is also differentiated based on the hierarchy of graduate qualifications. Referring to *Bloom's taxonomy*, the qualifications of graduates of the Bachelor's, Master's, and Doctoral Programs in Regional and Urban Planning will have different skill levels. The qualifications of graduates of Master's programs will be lower compared to the qualifications of Doctoral graduates and higher compared to the qualifications of graduates of Bachelor's programs. The differences between the main levels are:

- The knowledge and skills of graduates of the bachelor's program are at the level of *understanding* (Understand).
- The knowledge and skills of master's program graduates are at the *evaluate* level, *analyze*, and *apply*.
- Knowledge and Skills Graduates program doctor be at level *create* (create/create).

Table 1.1 Differences in Characteristics of Knowledge Elements of Bachelor's, Master's, and Doctoral Programs in Regional and Urban Planning

Elements of Knowledge	Undergraduate	Master's Program	Doctor Program
Planning theory	History of the development of thought	Core (paradigm shift in thinking)	Selective, eclectic
Substantive theory/ region and city	Extensive, comprehensive	Spesialisasi	Selective, eclectic
Planning methods/techniques	Spacious, ample exercise	Specialization, limited practice	Selective, eclectic
Professional development	Coded practice	Spesialisasi	Sintesis, eclectic
Planning practice	Spacious, ample exercise	Thematic, project-driven, limited exercise	Sintesis, eclectic
Planning values and ethics	Implement	Compile, convey values personal	Sintesis
Troubleshooting	Solve common, simple problems	Troubleshoot specialized/specialist issues	Finding new implications/solutions

Elements of Knowledge	Undergraduate	Master's Program	Doctor Program
Research	Apply Research methods for Answering the question	Apply in a critical theories, concepts, Methods and/or techniques to answer Issues	Showing novelty to theories, concepts and/or methods in answering problems research

The distinction between undergraduate, master's and doctoral levels should be implemented with a curriculum that clearly distinguishes the qualifications, competencies and also the structure of the courses developed. The 2019 curriculum tends to overlap between levels so that the skills or qualifications of graduates are not hierarchical. The hierarchy of qualifications of graduates of the Bachelor's, Master's, and Doctoral Programs in Regional and Urban Planning is grouped in Table 1.2.

Table 1.2 Differences in the Hierarchy Structure of Graduate Qualifications in Bachelor's, Master's, and Doctoral Programs in Regional and Urban Planning

	Undergraduate	Master's Program	Doctor Program
Knowledge	<u>Understand</u> Understand various theories and concept that explain and prescribe regional development and city	<u>Evaluate</u> <ul style="list-style-type: none"> Critically evaluate theories and concepts Mastering theory in the field of PWK specialization 	<u>Create</u> Generate knowledge (theory/conception/idea) new and specific scientific in the field of PWK
Skills	<u>Understand</u>	<u>Analysis</u>	<u>Stuart T</u>
n	Able to organize, compare, provide descriptions, and express the main ideas of the problem.	Conducting deepening or expanding knowledge and methods/tools in the field of PWK specialization	<ul style="list-style-type: none"> Formulating the essence of regional and urban planning, both substantive and procedural. Design research methodologies at an advanced professional level in research related to regional and urban planning. Communicating Scientific Works and Thoughts Orally and
	<u>Analysis</u>	<u>Apply</u>	
	Explain and identify the problems in the field of PWK	<ul style="list-style-type: none"> Apply theories, systems, processes, and methods in solving complex problems Formulating ideas from research results carried out 	
	<u>Apply</u>		
	Applying theories, systems, process, and methods in finish		

	Undergraduate	Master's Program	Doctor Program
	Simple Problems	for the development of science and technology <u>Evaluate:</u> <ul style="list-style-type: none"> Criticize and make recommendations on policies or action Troubleshooting 	Written through Reputable International Journals <ul style="list-style-type: none"> Transferring his knowledge, especially for academics
Value	<ul style="list-style-type: none"> Mastering the concept of academic integrity in general Mastering and understanding the concept of regional and urban planning in general	<ul style="list-style-type: none"> Mastering the concept of academic integrity in general and the concept of plagiarism specifically in research and publication manuscripts To be a leader who understands the development of the latest issues Current	<ul style="list-style-type: none"> Able to uphold academic integrity in general and prevent the practice of plagiarism Developing PWK knowledge

1.5 Stakeholders

Stakeholders who provide input in the preparation of this curriculum are:

- Advisory Board, which represents users and the professional world in the following fields/sectors:
 - Government/public planners at the central and regional levels,
 - Professional planner,
 - Industry/private sector related to regional and urban development,
- Alumni, and
- Professional associations, including the Association of Planning Experts (IAP) and the Association of Indonesian Planning Schools (ASPI)

1.6 Standards and Accreditation

PM-PWK refers to the following accreditations:

- BAN PT,
- ASIIN international accreditation
- In the future, there will be a special LAM for PWK-related fields

1.7 Reference

In the preparation of this curriculum document, there are several references that are used as the basis for writing curriculum documents, including:

- Edwards, M. M.; Bates, L. K. (2011). *Planning's Core Curriculum: Knowledge, Practice, and Curriculum of the S2 Program in Regional and Urban*

- Implementation. Journal of Planning Education and Research*, 31(2), 172–183. doi:10.1177/0739456X11398043
2. Frank, Andrea J. 2006. Three Decades of Thought on Planning Education. *Journal of Planning Literature*, Vol.21, No.1: 15-67.
 3. Friedmann, J. (1996). *The Core Curriculum in Planning Revisited. Journal of Planning Education and Research*, 15(2), 89–104. doi:10.1177/0739456X9601500202
 4. Feldman, M. M. A. (1994). *Perloff Revisited: Reassessing Planning Education in Postmodern Times. Journal of Planning Education and Research*, 13(2), 89–103. doi:10.1177/0739456X9401300202
 5. Goldstein, Harvey A. 2012. The Quality of Planning Scholarship and Doctoral Education. *Journal of Planning Education and Research* 32(4): 493-496.
 6. Klein, Garth R. 1997. Diversity, Competencies and Power: Developing Skills in an Undergraduate Planning Programme. *Research and Development in Higher Education*: 397 - 404. <http://www.herdsa.org.au/wp-content/uploads/conference/1997/klein01.pdf> diakses tanggal 20 Februari 2013.
 7. Long, J. G. (2012). *State of the Studio: Revisiting the Potential of Studio Pedagogy in U.S.-Based Planning Programs. Journal of Planning Education and Research*, 32(4), 431–448. doi:10.1177/0739456X12457685
 8. Niebanck, Paul L. 1992. Reshaping Undergraduate Education. *Journal of Planning Education and Research*, Vol.11, No.3: 227 – 231.
 9. Planning Accreditation Board. 2013. The Accreditation Document: Standard and Procedure of the Planning Accreditation Board. Chicago, Illinois: Planning Accreditation Board.
 10. Regulation of the Academic Senate of the Bandung Institute of Technology Number 003/IT1/SA/PER/2021 concerning Guidelines for Curriculum Preparation
 11. ITB Rector's Regulation No. 06/IT1. A/PER/2024 concerning Guidelines for the Preparation of the Bandung Institute of Technology Curriculum.

2 CURRICULUM EVALUATION

2.1 Continuous Improvement Cycle

The 2019 curriculum structure of the ITB Master of Urban and Regional Planning Program was prepared by referring to the 2013-2018 curriculum guidelines stipulated in the Decree of the Academic Senate of the Bandung Institute of Technology Number 11/SKI1-SA/OT/2012, SA No.03/2021, and Rector's Regulation No.6/2024. One of the paradigms used in the ITB education curriculum is the *Continuous Improvement* paradigm where the quality of education, relevance, and up-to-date curriculum, as well as the effectiveness and efficiency of its implementation are always improved on an ongoing basis through the implementation of the cycle of planning, implementation, evaluation, good feeding, and improvement. The *Continuous Improvement* paradigm is applied as an effort to improve the quality of teaching as well as a form of adjustment to the dynamic challenges that occur at the national and global levels and is future-oriented.

Repair sources/inputs are consistently drawn from:

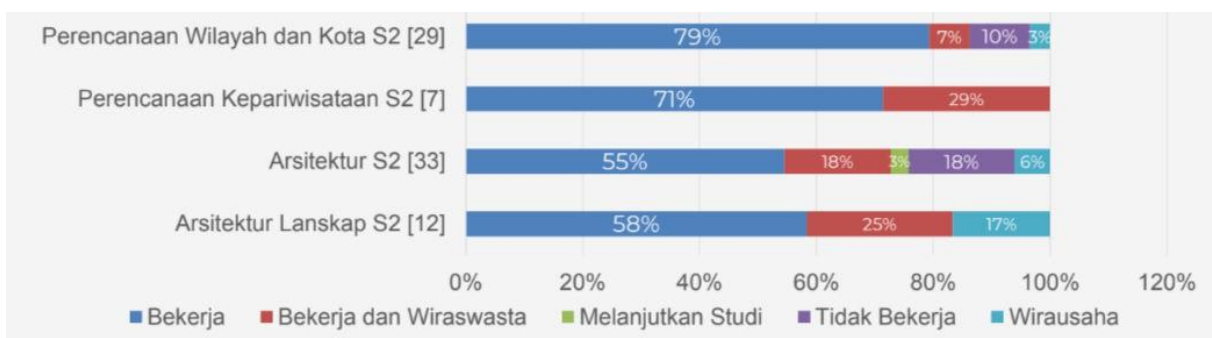
- 1) Input from the *Advisory Board Meeting*, whose members represent the Government/public planners at the central and regional levels, professional planners, industry/private sector related to regional and urban development, and alumni. The meeting is held at least twice a semester, with one agenda related to the curriculum and professional development.
- 2) Surveys and *tracer studies* are conducted on alumni/graduates.
- 3) The results of the evaluation by students (EDOM) are carried out every semester, which is then responded to by each lecturer in the portfolio.

2.2 Evaluation of Study Program Analysis

2.2.1 Evaluation of the Scientific Field

To find out the suitability of the scientific field of regional and urban planning with the needs in the world of work, the curriculum team conducted a study from the results of the 2022 tracer study based on the 2019 Curriculum. The components of the tracer study that are considered suitable in the evaluation assessment of the scientific field include the percentage of study suitability with the job, job status, and type of work. From the assessment of the results of the tracer study, it is known that 86% of PWK S2 graduate students have worked and 75% work in jobs that are in the same field as college. In addition, PWK S2 graduates work in various sectors dominated by government (44%) and private (38%) agencies.

Employment Status



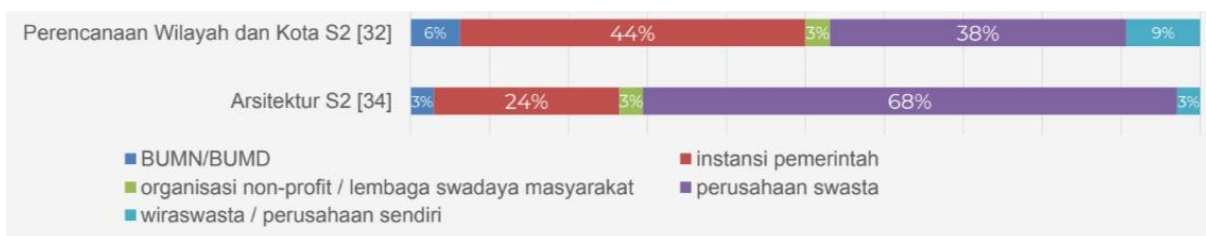
Source: Tracer Study SAPPK, 2022

Suitability of college to work



Source: Tracer Study SAPPK, 2022

Job Type



Source: Tracer Study SAPPK, 2022

From these results, it can be concluded that master's education is in accordance with the field of work of graduates. Thus, it is recommended to maintain and improve the quality of study materials in order to continue to support the professional development of graduates according to their specialties.

2.2.2 Evaluation of the Educational Objectives of the Study Program

The Master of Urban and Urban Planning Study Program has conducted an evaluation and discussion with *stakeholders* (teachers, advisory boards, employers, and alumni) on May 31, 2024. Considerations in the discussion included the suitability of the goals of the study program with the needs of graduates in the field, conformity with KKNI, as well as integration and correlation between the levels of the PWK Bachelor, Master, and Doctoral Study Programs.



Figure 2.1 Documentation of Stakeholder Meeting Activities in

2024 Some of the input points from the results of *the stakeholder* meeting are as

follows:

1. The curriculum should be prepared with the aim of developing the capacity of students and lecturers.
2. A curriculum that can support *complex system thinking* in accordance with the needs of real problems in the field is needed, so that it can create *end-to-end* systems in various typologies of planning areas, including land, air, and sea.
3. As the final product of planning is in the form of legal documents, a curriculum that supports

understanding of legal languages is needed.

4. Graduates' competencies/roles are needed that are more clearly aligned with the needs of the world of work, local and global professional challenges.
5. The importance of a curriculum that can prepare students in the Industry 4.0 era and utilize technology without being dragged into technological turbulence.
6. Developing student competencies so that they can collaborate across fields and learn new competencies.
7. Development of learning processes that can form resilient students and have *Sense of belonging*/ not feeling isolated in the virtual era.

Complementing this, the curriculum team of the PWK Master Study Program conducted an additional survey related to the relevance of the substance of the curriculum document which produced the following results. Based on the results of the questionnaire distribution, the following assessment was obtained.

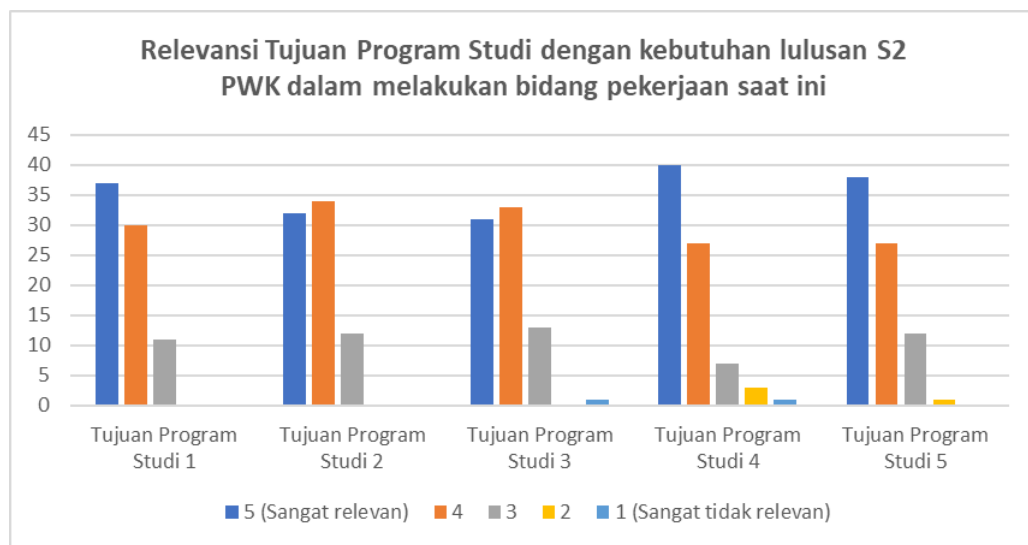


Figure 2.2 Respondents' Assessment of the Relevance of Study Program Objectives and Field of Work

The majority of respondents (> 80%) assessed that the objectives of the study program were relevant to the needs of respondents in carrying out their current field of work. In addition, there are several proposals that need to be considered in the formulation of study program objectives, namely:

1. Graduates who can initiate collaboration between *stakeholders* in the implementation of programs or innovations in the field of PWK that are in accordance with the needs of the community
2. Graduates who are able to create innovation and be critical of current issues in PWK
3. Graduates who can integrate a wide range of educational sciences and experiences to produce multi-benefit planning.

Based on the perspective of employers, the objectives of the current study program are considered to be in accordance with the qualifications of the workforce needed in various sectors (Central Government, Regional Government, and University). The results of the discussion and evaluation have reduced the Objectives of the 2019 Curriculum Study Program from five points to four points, namely:

1. Graduates who can develop the substance and planning process that is appropriate and anticipatory to the needs and challenges of the present and the future.
2. Graduates who can lead a team of professional planners in government and non-government who are able to encourage the policy reform process in the implementation of regional and urban planning.
3. Graduates who can carry out and disseminate research and community service in the field of

- regional and urban planning.
4. Graduates who can continue to doctoral education both at home and abroad

The evaluation of the educational objectives is also carried out by reflecting on their relationship with the Goals of ITB, SAPPK and the dignity of ITB Education. The results, as shown in Table 2.1 below, are considered to have a good correlation.

Table 2.1 Relationship of Study Program Education Objectives with ITB and F/S Objectives

	Purpose					
	ITB 1 (Active & success ful in professi on)	ITB 2 (Further education)	ITB 3 (Pioneering & leadership)	SAPPK 1 (Creative & critical, ethical, responsible thinking: professionals, entrepreneurs, leaders & agents changes)	SAPPK 2 (Innovative, quality, analytical and responsive research and policies to developments and challenges global & local)	SAPPK 3 (Creation & dissemination of knowledge, its application, improvement of well-being, improvement of the environment sustainable)
Objective 1 (Substance & Process of PWK)	X	X	X	X	X	X
Objective 2 (Leader of the Governance Unit & Team Professional)	X	X	X	X		X
Objective 3 (Research & Community Service)	X	X	X	X		X
Objective 4 (Continue study)		X			X	X

Note: "X" indicates that the Education Objectives of the Study Program are consistent with the objectives of the institution

PM-PWK has just implemented the 2023 Curriculum which contains the educational objectives of the new study program. Important considerations in its preparation are local and global challenges and issues, especially in the regional and urban planning profession. It is hoped that PM-PWK graduates will have leadership to face local and global professional challenges.

In 2024, the ITB curriculum team has directed all study programs at each level to make changes to the curriculum simultaneously. In response to this, the lecturers and the PWK Master's Study Program curriculum change team held a follow-up discussion to evaluate the objectives of the 2023 Curriculum study program. The recommendations from the results of the discussion concluded that the educational goals listed in the 2023 Curriculum are still relevant and can be used.

2.3 Evaluation of Learning Plans

2.3.1 Evaluation of Learning Outcomes

Curriculum of the S2 Program in Regional and Urban

Similar to the evaluation of the educational objectives of the study program, the Advisory Board Meeting on May 31, 2024 also reviewed the learning achievements of graduates. Considerations in the discussion include the suitability of the goals of the study program with the needs of graduates in the field, conformity with KKNi, SINDikti, TC03 standards/criteria for ASIIN International Accreditation, as well as integration and correlation between the levels of the Bachelor, Master, and Doctoral Study Programs of PWK.

The results of the evaluation of the Graduate Learning Outcomes (CPL) of the 2023 Curriculum carried out by the PM-PWK curriculum team are substantially still considered relevant and in accordance with SINDikti with the level of knowledge competence. However, there are some keywords that are not complete to reflect the targets that should be achieved. The following are the recommendations produced.

Table 2.2 Comparison of Curriculum Learning Outcomes 2023 and 2024

Yes	Graduate Learning Outcomes Curriculum 2023	Proposed Graduate Learning Outcomes Curriculum 2024
1	Mastering the theory and ethics of planning and sustainable development of regions and cities	Mastering the theory and ethics of planning and sustainable development of regions and cities
2	Mastering theories and methods in processes and substances in the field of regional and urban planning and development specialization	Mastering concepts, theories and methods in processes and substances in the field of regional planning and development specialization and city
3	Able to apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and institutional factors	Can Apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and Institutional
4	Able to conduct research in the field of regional and urban planning and development specialization	Able to conduct research in the field of regional and urban planning and development specialization

In terms of distribution and the relationship between the Constitutional Court and the CPL, visually CPL 2 carries too many Constitutional Courts because of the existence of the Constitutional Court of the Choice Path. In addition, in the old format, one course was only allowed to carry out 1 CPL, so this substance needs to be improved. In terms of CPMK, each teaching lecturer has reviewed and readjusted the improvements that can be seen in the RPMK as an attachment document to the 2024 Curriculum Document.

2.3.2 Evaluation of Study Materials and Courses

The evaluation of study materials and courses is carried out internally by the curriculum development team and disseminated at Study Program Meetings which are carried out several times in May 2024. In

the previous curriculum, the pillars of PWK knowledge were only mentioned in the Undergraduate Program Curriculum, while the 2023 PWK S2 Curriculum mentioned related to knowledge elements. Basically, the S1, S2, and S3 programs have the same pillars of knowledge, namely Planning Theory, Environment, Economics, Social and Population, Spatial Systems and Infrastructure, Institutions, and Planning Methods. These pillar points are considered still relevant to represent the study material in PM-PWK. The difference is that in the master's program, aspects of the environment, social population, economy, spatial and infrastructure systems, and institutions, are deepened in each specialization/chosen path. The results of the evaluation also recommend the addition of "Research Planning" study materials for master's and doctoral programs that have stronger research components than undergraduates.

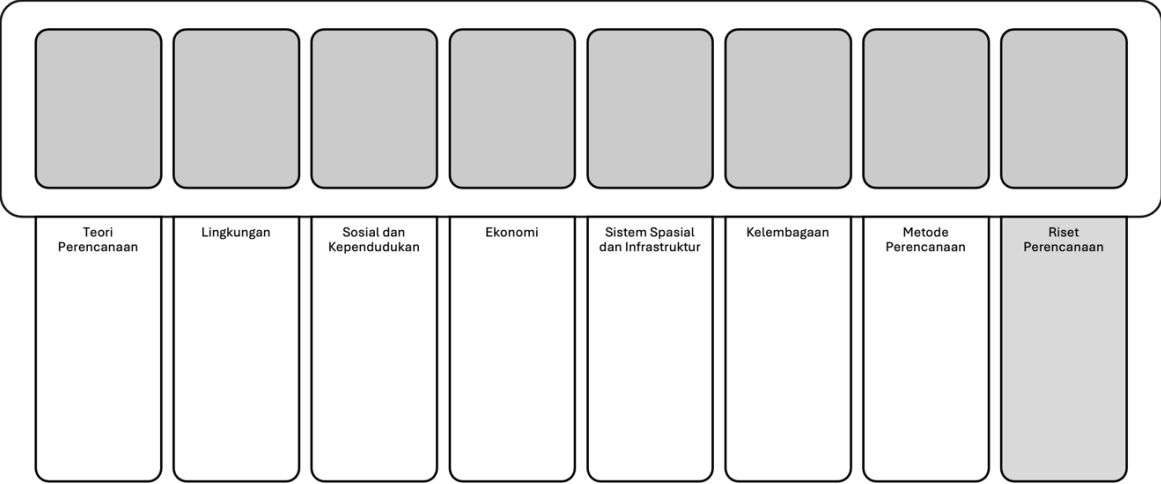


Figure 2.3 Study Materials Taken from the Knowledge Trunk in PM-PWK

2.3.3 Evaluation of Curriculum Structure

Evaluation of study materials and courses is carried out: (1) internally by the curriculum development team and disseminated at Study Program Meetings which are held several times in May 2024; (2) discussion with the Advisory Board on May 31, 2024; (3) distribution of questionnaires to alumni. What is considered is the development of science and profession, as well as the mandatory content mandated by ITB.

The distribution of questionnaires was carried out to alumni. Referring to the Academic Standard Operating Procedure document of the Master of Urban and Urban Planning (MPWK) Study Program, the 2019 curriculum, MPWK students are required to take 14 credits of compulsory courses for study programs, 12 credits for compulsory courses for elective paths, 2 compulsory elective courses for students in the same field and 6 credits for non-elective students, 2 credits for free elective courses, and 6 credits of thesis courses. Through the distribution of questionnaires, respondents were asked to assess the relevance of the curriculum structure to the need to carry out field work that is currently being carried out, the results are as follows.

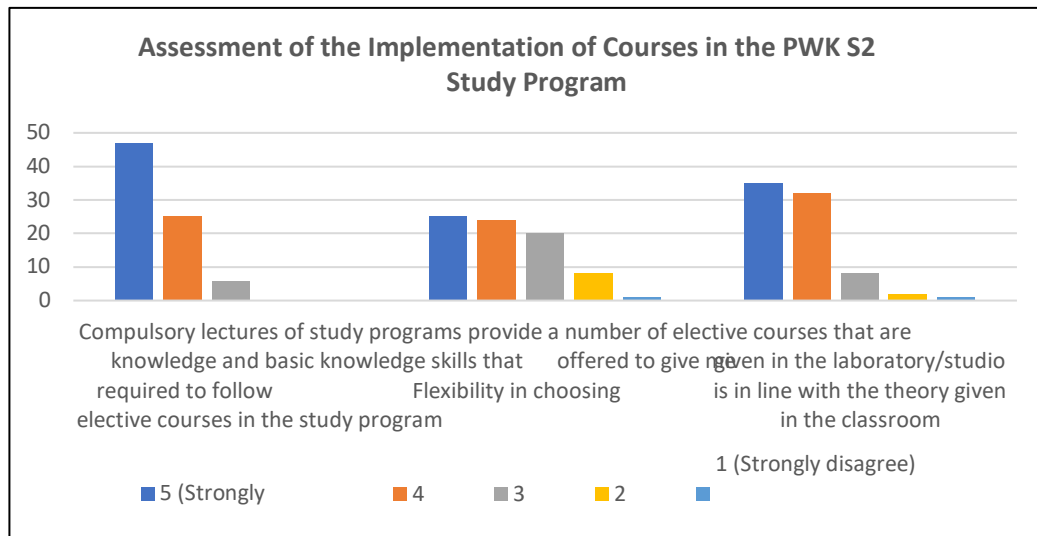


Figure 2.4 Respondents' Assessment of the Relevance of Curriculum Structure and Field of Work

The majority of respondents (>75%) consider that the preferred path structure (japil) taken is relevant to the respondents' needs to do their current work. However, the implementation of courses in the Master of Regional and Urban Planning program is considered to have not provided full flexibility for students to choose courses, as shown in the following figure.

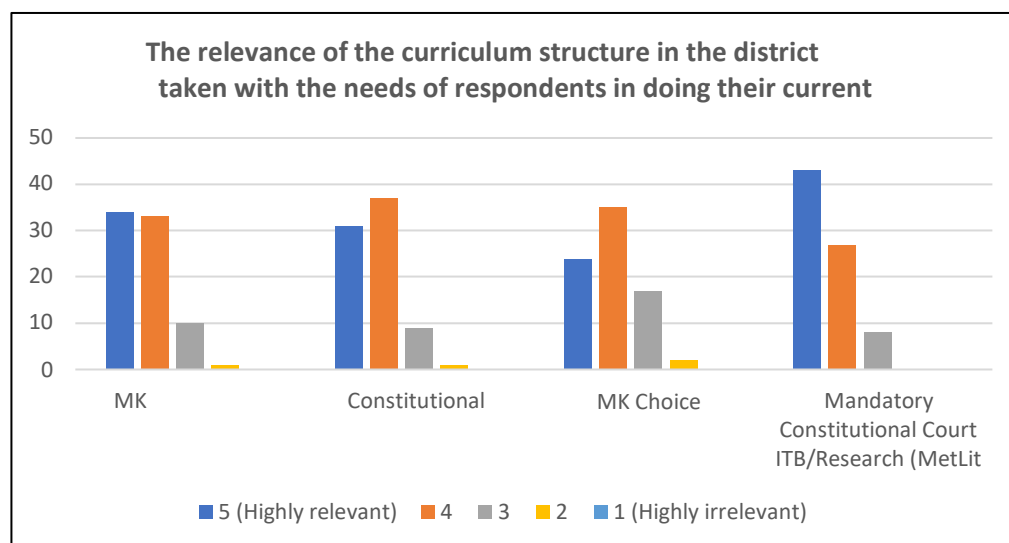


Figure 2.5 Respondents' Assessment of the Implementation of the Master of Urban Planning Program Courses

The information obtained through figure 2.4 regarding the implementation of the course is as follows:

- 92% of respondents consider that compulsory study program courses provide the basis of knowledge needed to take elective courses
- 62% of respondents consider that the number of elective courses offered gives them flexibility in choosing
- 85% of respondents rated that the knowledge and skills imparted in the laboratory/studio are in line with the theory imparted in the classroom

Based on this assessment, it can be concluded that changes can be made to the curriculum structure,

including the number of courses, to give students full flexibility to choose courses according to their interests. In addition, some respondents suggested that the implementation of lectures in the Master of Regional and Urban Planning program should be multiplied with practicums and field lectures (applicable courses) as well as the use of the latest *tools* or *software* in accordance with the times. This has been partially responded to in the 2023 Curriculum, namely by developing a theoretical Constitutional Court with practicum in each district of 4 credits. For the 2024 curriculum, it is recommended:

- 1) The strengthening of the MK studio is in accordance with the weight and material of the project following contemporary developments.
- 2) The chosen path revitalizes the material/study materials, and allocates them to the theoretical MK and the theoretical MK with a total of 13 credits of practicum.
- 3) Strengthening free choice courses (MKPB) both structured and non-structured to answer the challenges of changing times, professional expertise and research.

2.3.4 Program Scheme Evaluation

Program scheme evaluation is carried out: (1) internally by the curriculum development team and disseminated at Study Program Meetings which are held several times in May 2024; (2) distribution of questionnaires to alumni. What is considered is scientific and professional development, as well as curriculum guidelines at ITB, especially related to program schemes.

Preferred Paths

Referring to the Academic Standard Operating Procedure document of the Master of Urban and Urban Planning (MPWK) Study Program, curriculum 2019, MPWK students outside the international class program are required to choose one of the elective paths (japil) provided, namely:

1. Urban Planning
2. Regional Development
3. Infrastructure and Transportation Systems
4. Urban Governance
5. Disaster Management Planning
6. Innovation Systems and Smart Cities

Based on the perspective of employers, the six constituencies currently available are relevant to the needs of the job market, but if the constituencies are abolished and replaced with more flexible options, it can also meet the needs of the job market well. Respondents who graduated from the MPWK program were asked to give an assessment of the current implementation of the legislative session, as shown in Figure 2.6.

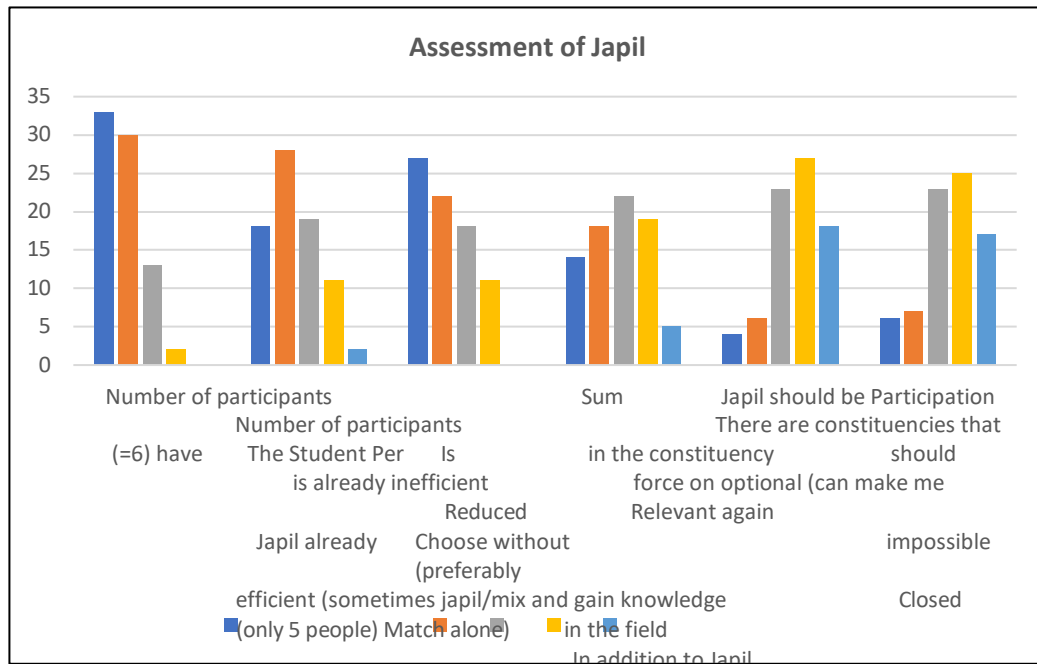


Figure 2.6 Respondents' Assessment of the Implementation of the Preferred Route (Japil)

The majority of respondents considered that the current number of japil (6 japil) was efficient. However, there are several things that need to be considered for the implementation of the japil which are as follows:

- 58% agree that the number of students per batch in the Japil is efficient (sometimes only 5 people)
- 62% agree that the election should be optional (you can vote without your *own mix and match*)
- 31% agree that participation in the Japil makes it impossible for students to gain knowledge in fields other than the Japil
- 12% agree that the number of constituencies should be reduced
- 16% agree that there are constituencies that are no longer relevant (should be closed)

Based on this assessment, it can be concluded that the implementation of the japil should be reviewed again in terms of the system (mandatory/optional), the number of participants, and the relevance of the course to the challenges of the current times. Some respondents considered that the opening of the regional elections should not only follow the minimum number of students who participated, but also follow the latest planning developments that are more multidisciplinary. The opening of the Japil in the future is recommended to be able to consider developing strategic issues such as tourism and more specific planning topics (Example: *Livable City*) and be able to respond to current market challenges. In addition, the opening of the constituency should consider the absorption of labor in the field, especially ASN. Respondents were also asked to give an assessment of the implementation of the studio in each japil.

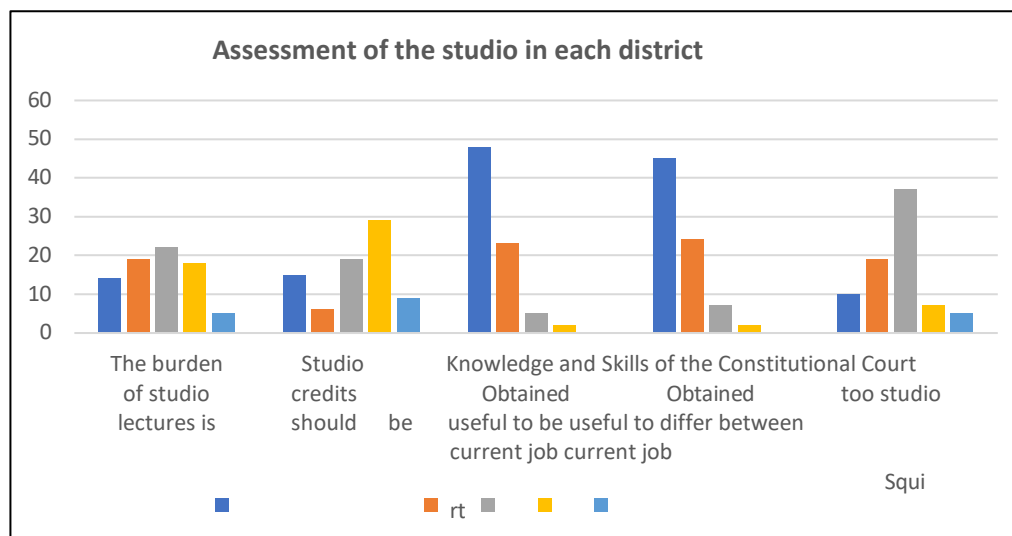


Figure 2.7 Respondents' Assessment of the Implementation of the Selected Pathway Studio

The majority of respondents (< 85%) agreed that the knowledge and skills gained through the japil studio are very beneficial for the job they are currently pursuing. However, there are 42% of respondents who consider the studio tuition load too heavy, and 26% of respondents consider that the credits of studio courses should be increased according to the tuition load. Regarding the implementation of the studio, the respondent suggested that the implementation of the studio should be placed in the 3rd semester and the burden should be adjusted so that students can work on their thesis at the same time. In addition, 37% of respondents considered that the competence of studio courses was too different between japil. There were proposals from respondents who suggested that it should be possible to merge studios between constituencies or collaboration between them for the gap in competencies obtained.

The recommendation from the results of this evaluation is to develop a Planning Thematic Studio with an appropriate weight.

PPSM (Master's Degree Unification Program)

PPSM is one of ITB's efforts to attract and increase the number of ITB S2 students. SAPPK ITB S1 and S2 PWK Study Programs have been implementing this program since 2012 with the highest number of applicants in 2020, with a total of 13 students. The following is the number of PPSM graduates of the Master of Regional and Urban Planning Study Program.

Table 2.3 Student Intake Data for the Master Program in Regional and Urban Planning ITB 2015-2022

No	Academic Year	PWK Undergraduate Study Program Students Participate in PPSM Magister PWK	Number of students of the PWK Master's Study Program
1	2015	5	85
2	2016	2	80
3	2017	8	98
4	2018	5	60
5	2019	9	53
6	2020	13	72
7	2021	3	74
8	2022	4	46

The interest in PPSM every year is quite high, this underlies that there is potential for students to be interested in the PWK undergraduate and master's integration programs. In the development of this program, of course, adjustments are needed to the existing curriculum because considering the burden of each semester which is quite high for students. The difference in the study time of the start of the Integration Program which is 2 semesters faster than PPSM is a challenge to be able to structure the program to be better while still prioritizing the quality of graduates who will later be ready to enter the world of work.

PISM (Master's Degree Integration Program)

The Master's Bachelor's Integration Program has been initiated by all faculties at ITB in 2023. This program is aimed at increasing the intake of S2 ITB where students can start taking MK S2 at ITB from the 5th semester of lectures in the S2 ITB department, both linear/non-linear and cross-faculty. In 2023, unfortunately, the intake performance of both S1 PWK and non-PWK is still poor. Where PWK S1 students tend to take other majors outside PWK.

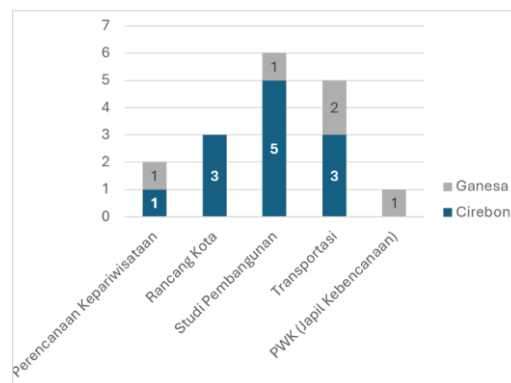


Figure 2.8 Recap of PWK S1 Students PISM Participants

Due to the lack of in-depth information, this PISM evaluation still needs to be carried out. For now, it is recommended that the placement of MK taken by PISM students can be more flexible, namely prioritizing MKPB that is in accordance with the student's schedule. Certain MKWP or MK that are more advanced in nature can be taken in the later semester or when they are registered as Master's students.

2.4 Learning Development Evaluation

The evaluation of learning development is carried out through a review of the portfolio of each course by the teaching lecturers, especially in the past year. In the course of the 2019 and 2023 curriculum, teachers are able to apply learning methods based on SAP that were made and agreed upon at the beginning of the semester. In general, lecturers also prepare learning plans based on evaluation and improvement from the previous year's teachers. Almost all courses have implemented learner-centred education (LCE) even though with different formats and weights. Methods such as studios, practicums, class discussions, role playing, exams, and seminars are well implemented.

The recommendation from the results of this evaluation is to regulate the development of LCE learning per type of course so that the burden of students remains balanced while still achieving CPL and educational goals well.

2.5 Evaluation of the Learning Process

The evaluation of the learning process is carried out through the distribution of questionnaires to alumni with the following results and recommendations.

Lecture Resources and Facilities

The availability of resources in study programs is one of the components to support lecture facilities and curriculum implementation. Through the distribution of the questionnaire, respondents were also asked to give an assessment of the resources and lecture facilities available in the Regional and Urban Planning study program, which is shown in the following figure.

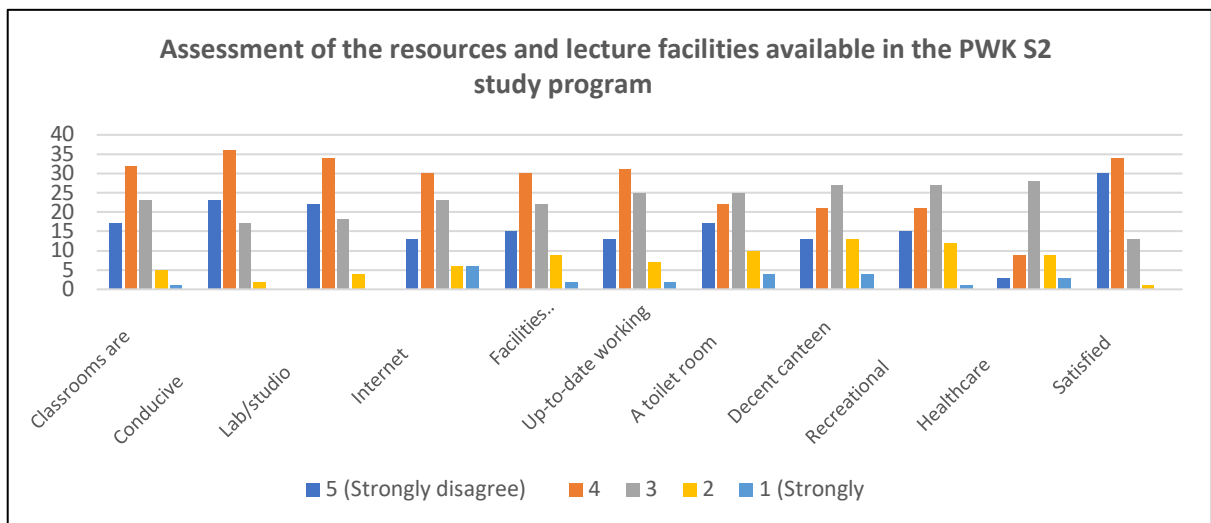


Figure 2.9 Respondents' Assessment of Lecture Resources and Facilities

Overall, 82% of respondents were satisfied with the education obtained at ITB which was supported by the availability of proper facilities and resources, but there were several facilities that were considered not fully feasible, namely canteens, recreational facilities, and health facilities.

In addition to the availability of lecture facilities, the availability of resources is also a component to support the implementation of the curriculum in the Master of Regional and Urban Planning study program. The resources reviewed in the curriculum implementation evaluation include the number of compulsory courses, the number of elective courses, the number of teaching lecturers per course, and the number of guidance students. The respondents' assessment of the efficiency of resource utilization in the Master of Regional and Urban Planning study program is shown in the following figure.

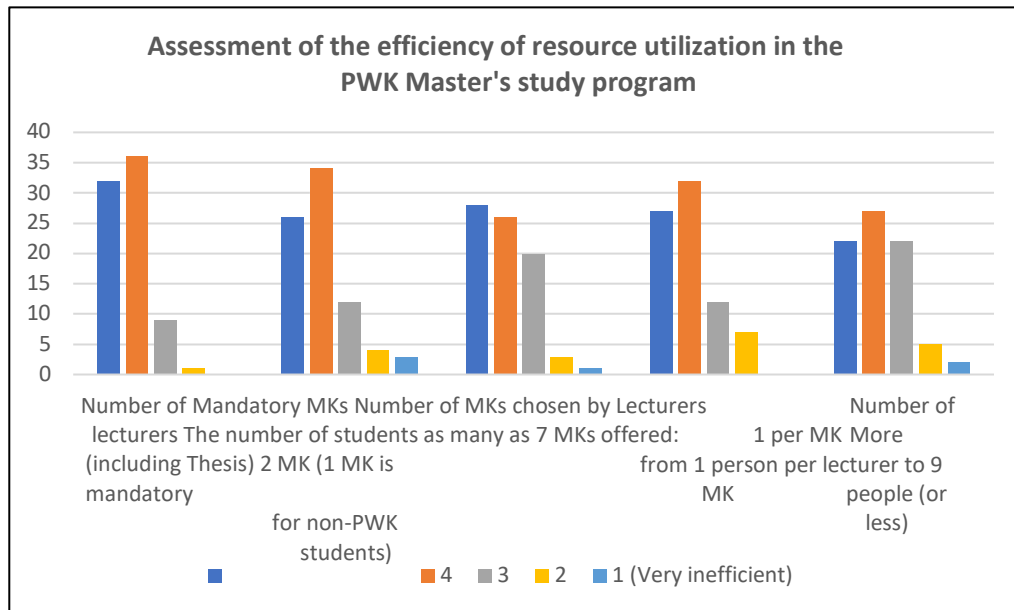


Figure 2.10 Respondents' Assessment of Resource Utilization Efficiency in the Master of Urban and Urban Planning Study Program

The results of respondents' assessment of the efficiency of resource utilization are as follows:

- 87% of respondents considered the number of Mandatory Constitutional Courts as many as 7 Constitutional Court (including Thesis) to be efficient
- 76% of respondents rated the choice of MK offered: 2 MK (1 MK mandatory for non-PWK students) is efficient
- 69% of respondents considered the number of teaching lecturers 1 per MK to be efficient
- 75% of respondents considered the number of teaching lecturers to be more than 1 person per MK to be efficient
- 62% of respondents considered the number of guidance students per 1 lecturer as many as 9 people (or less) to be efficient.

With these results, Study Programs and Deans need to consider professionalization so that lecturers do not teach too many courses. This can be done by reducing the same courses between levels. In addition, with a new structure of 18 credits per semester, it must be ensured that the maximum course taken by students is six (6).

Students' Problems During College

In evaluating the implementation of the 2019 curriculum, a review was conducted of the problems experienced by respondents while studying in the Master of Urban and Urban Planning program, including academic, financial, psychological, social and/or cultural interaction, and health. Figure 2.11 shows the frequency of problems experienced by respondents during college.

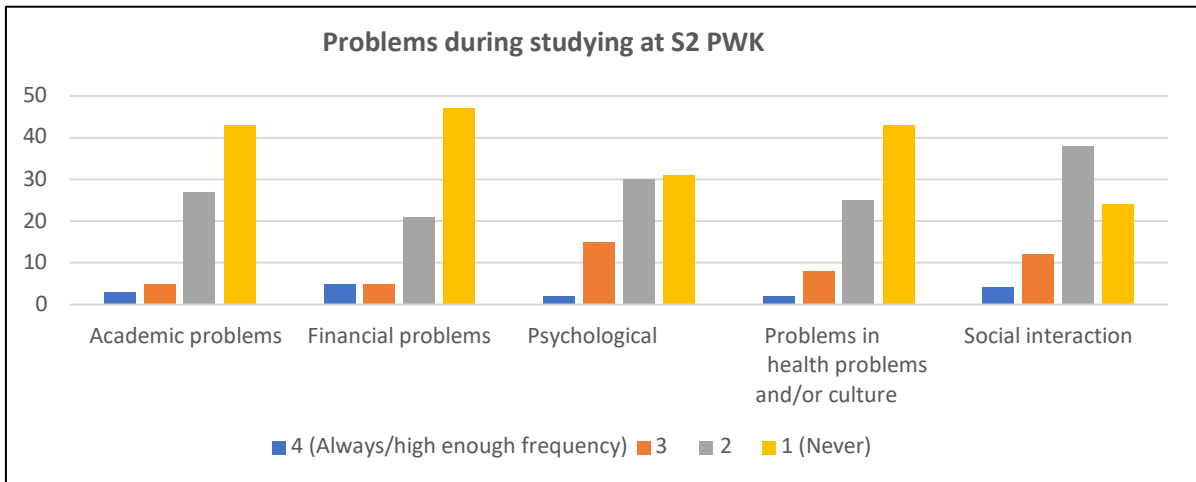


Figure 2.11 Problems Experienced by Respondents while Studying in the Master Program in Urban and Regional Planning

The results of the questionnaire showed that as many as 40-60% of respondents rarely experienced problems be it academic, financial, psychological, social and/or cultural interactions, and health during college. Meanwhile, respondents who experienced academic, financial, psychological, social and/or cultural interaction, and financial problems were asked to provide an assessment of the influence of the problems experienced on academic achievement during college. The respondents concerned were also asked to give an assessment of the assistance that was useful in solving problems. Figure 2.13 shows the influence of problems during college on academic achievement, while figure 2.14 shows the respondents' assessment of the type of assistance in solving the problems faced.

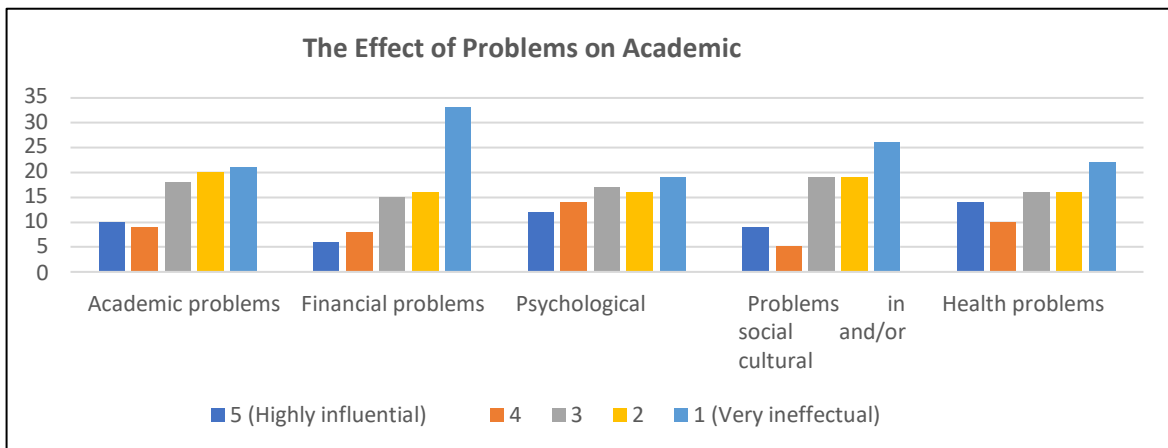


Figure 2.12 The Effect of Problems During College on Academic Achievement

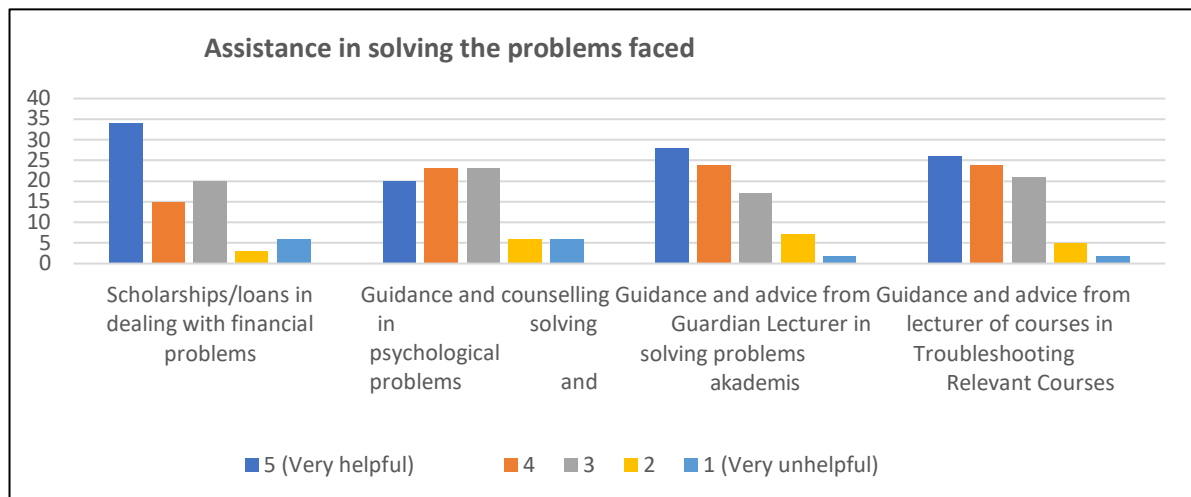


Figure 2.13 Help in Solving Problems

Respondents who experienced problems during college felt that the problems they faced had an effect on academic achievement (less than 35%). Based on their experience, around 55-65% of respondents consider that scholarships, guidance, counseling, and advice from the lecturer concerned can help solve the problems they face.

The recommendation of these findings is that in addition to ITB providing access to counseling and psychological assistance, the 2024 curriculum must be designed with a balanced weight and a pleasant learning experience.

Qualifications of PWK Master's Graduates

In addition to the questionnaire, the results of the Advisory Board meeting also recommended several things. Employers consider that continuous evaluation according to market desires needs to be carried out to support the improvement of the revision of the curriculum of the PWK ITB study program. The results of the open-ended questionnaire showed that graduates of the PWK Master's program showed quite good performance in all six components (ethics, expertise, language skills, ability to use information technology, cooperation, and self-development). In addition, employers agree that there are several qualifications required by future graduates of the Master of Urban and Urban Planning program, namely:

- Able to use the right analysis methods to solve problems in the PWK field
- Able to use modern tools to solve problems in the PWK field
- Able to perform project management
- Able to lead a team of professional planners
- Able to carry out and disseminate research in the field of PWK
- Able to understand the development of issues on a global, regional, and national scale

2.6 Improvement Efforts

From the results of the evaluation that have been explained earlier, the revision of the Curriculum of the PWK SAPPK ITB Master's Study Program can be categorized as a major category. Where the changes include:

- (1) Phrase/editorial changes in CPL;
- (2) Contextualization of Study Program Study Materials in accordance with the challenges of global and local issues;

- (3) Changes in Curriculum Structure (Addition of Digital Literacy MKWI, Adjustment of Credit Weights with New Hours Calculation, and Changes in the Order of MK Japil) in accordance with the new standard of 54 credits; and
- (4) The transfer of the SAP format to RPKM will be explained in detail in the next sections.

3 LEARNING PLANNING

3.1 Educational Objectives of Study Programs

Based on the results of evaluation and discussion with stakeholders and paying attention to the vision and mission of ITB and SAPPK, as well as the essence of ITB Education, the objectives of PM-PWK education are:

1. Graduates who can develop the substance and planning process that is appropriate and anticipatory to the needs and challenges of the present and the future.
2. Graduates who can lead a team of professional planners in government and non-government who are able to encourage the policy reform process in the implementation of regional and urban planning.
3. Graduates who can carry out and disseminate research and community service in the field of regional and urban planning.
4. Graduates who can continue to doctoral education both at home and abroad

The profile of graduates achieved after 5 years of graduation is as follows.

Table 3.1 Graduate Profile

Profile	Ability Explanation
Spatial Planner	Able to plan regional and urban spatial planning based on considerations in the field, developing planning concepts, and development goals or the desire of employers while still referring to sustainable development
Development Planner	Able to plan regional and city development based on deepened planning specializations.
Project Manager	Managing and leading urban and regional planning projects involves a wide range of knowledge and stakeholders
Policy Analyst	<ol style="list-style-type: none">1. Analyze and evaluate the performance of an implementation of urban and regional planning that pays attention to the role of stakeholders and developments in the transportation sector with the latest tools2. Formulate development policies, strategies, and programs cities and regions as input for stakeholders and decision-makers
Researcher in the field of regional and urban planning and development	Develop innovative research and produce scientific publications in areas related to regional and urban planning
Community movers/advocates	<ol style="list-style-type: none">1. Carry out non-governmental activities which include the preparation, implementation, publication, and evaluation of community development programs within the framework of regional and urban development2. Formulate community development policies, strategies, and programs as input for stakeholders and decision-makers

3.2 Graduate Competency Standards

Based on the Regulation of the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia Number 53 of 2023 concerning Quality Assurance of Higher Education, the minimum competency that must be achieved in the master's program is to be able to master the theory of certain fields of knowledge to develop science and technology through research or the creation of innovative works. According to the SNDikti, the minimum level of competence is P5-6, K5 and S5. In this case, it means that graduates of MPWK SAPPK ITB can at least master the theory of regional and urban planning so that they can develop science and technology. In addition, the Regulation of the Minister of National Development Planning/Head of the National Development Planning Agency of the Republic of Indonesia Number 12 of 2020 concerning the Implementation of the Indonesian National Qualification Framework for Development Planning has several levels of competence that are set for both First Expert Planners, Young Expert Planners, Associate Expert Planners, and Principal Expert Planners. These qualifications are then described according to Bloom's theory of competencies for domains of knowledge, special and general skills, and attitudes as described in the table below.

Table 3.2 Minimum Competency Standards

No	Graduate Competencies	Competency Level		
		P	K	S
Young Expert Planner				
1	Able to plan and manage resources under his/her responsibility, and comprehensively evaluate his/her work by utilizing science, technology, and/or the arts to produce Organizational strategic development measures	6	5	5
2	Able to solve problems of science, technology, and/or art in their scientific fields through a monodisciplinary approach.	6		
3	Able to conduct research and make strategic decisions with full accountability and responsibility for all aspects that fall under the responsibility of his/her area of expertise	6		5
Associate Expert Planner				
1	Able to develop knowledge, technology, and/or art in their scientific fields or professional practices through research to produce innovative and tested works.	6	5	5
2	Able to solve problems of science, technology and/or art in their scientific fields through an interdisciplinary or multidisciplinary approach	6		
3	Able to manage research and development that is beneficial to society and science, and able to receive national and international recognition.	6		5
	Minimum Competency Level	6	5	5

Note: "Z" is a number indicating Bloom's level of competence (P=1-6; K=1-5; S=1-5)

3.3 Graduate Learning Outcomes

The 2024 Curriculum of the Master of Urban and Urban Planning Study Program has four Graduate Learning Outcomes as described in the table below. This CPL is a derivative of the objectives of the study program that have been explained previously by considering SN-Dikti which requires the competency levels of P5-6, K5 and S5.

Table 3.3 Graduate Learning Outcomes

No.	CPL	Graduate Learning Outcomes
1	HCMC	Mastering the theory and ethics of planning and sustainable development of regions and cities
2	KP	Mastering concepts, theories and methods in processes and substances in the field of Specialization in Regional and Urban Planning and Development
3	PS	Able to apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, and infrastructure factors, Technology and Institutions
4	RP	Able to conduct research in the field of planning and development specialization Regions and Cities

CPL 2 states that the mastery of concepts, theories, and targeted methods is in the field of specialization in regional and urban planning and development where in the context of PM-PWK is the Preferred Path. In addition, CPL 1, 3, and 4 do not have multi-level competencies, so only CPL 2 is described into several Sub-CPLs as mentioned in the table below.

Table 3.4 Sub-CPL and Linkage to Competencies for CPL 2

CPL	No	Sub-CPL	Competency Level		
			P	K	S
2	2.1	Able to formulate strategies to direct urban development	6	5	5
	2.2	Able to formulate innovative strategies for sustainable regional development based on bukti (<i>evidence-based</i>)	6	5	5
	2.3	Able to explain, analyze needs and plan infrastructure and transportation systems	6	5	5
	2.4	Able to understand the arena, analyze problems and formulate development governance strategies, especially in the scope of regions and cities in realizing sustainable development	6	5	5
	2.5	Able to formulate solutions and/or disaster risk reduction strategies that are integrated in inclusive, resilient development planning and sustainable	6	5	5
	2.6	Able to explain the management of the role of urban informatics and model data from various sources to develop systems Efficient Urban	6	5	5
		Maximum Competence	6	5	5

Note: "Z" is a number indicating a level of competence

3.4 Learning Outcomes Matrix Towards Educational Goals

The following Table 3.4 shows the relationship of CPL to all profiles in the form of a matrix table.

Table 3.5 Relationship between Graduate Achievement and Study Program Educational Objectives

No.	CPL	TPPS			
		Substance & Process	Pemimpin	Research ers	More Studies
1	<i>Mastering the theory and ethics of planning and sustainable development of regions and cities</i>	XX	X	X	XX
2	<i>Mastering concepts, theories and methods in processes and substances in the field of regional planning and development specialization and city</i>	XX	X	XX	XX
3	<i>Able to apply and communicate critically theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, and technological factors and institutions</i>	X	XX	XX	X
4	<i>Able to conduct research in a field of specialization Planning and development of regions and cities</i>	X	X	XX	XX

Note: "X" indicates that Graduate Achievement is consistent with the Education Objectives of the Study Program

4 PROGRAM MAYOR

4.1 Program Identity

The Major program provided is named "Urban and Regional Planning" which is a linear continuation of the Bachelor of Urban and Regional Planning. In accordance with the explanation in Chapter 1, there are six choice paths (options) in PM-PWK, namely:

1. Elective Path/Specialization in Urban Planning;
2. Elective Path/Specialization in Sustainable Area Development;
3. Choice Path/Specialization of Infrastructure and Transportation System;
4. Elective Path/Specialization in Urban Governance;
5. Elective Path/Specialization in Disaster Management Planning;
6. Choice/Specialization Pathway for Innovation Systems and Smart Cities;

4.2 Student Admissions

Students of regular programs who can be admitted to the Master of Urban and Urban Planning Program are students from the following categories:

- a. Graduates of the S1 PWK Study Program who are members of the planning school association in the country or continent where the program is located as evidenced by academic transcripts and interview confirmations, or
- b. Graduates of other S1 Study Programs that are relevant to the field of PWK can be proven by academic transcripts containing a minimum of 6 (six) credits of courses related to the basic competencies of PWK (spatial, physical, environmental, social, economic, and institutional) and interview confirmation, or
- c. Graduates of other S1 Study Programs who are not relevant (do not teach courses related to PWK) but have professional or official work experience in the field of PWK or related to the basic competencies of PWK for at least 2 (two) full months (equivalent to 320 working hours) with a minimum position as an expert assistant as evidenced by contracts/assignment letters and work outputs.

There are five policy bases for the recruitment of prospective new students, namely:

1. Based on the standards set by the ITB Graduate School and the PWK SAPPK ITB Study Program. This policy is referred to as the regular student admission procedure.
2. Based on PPSM (Bachelor-Master Unification Program) or commonly called *fast-track* where prospective students who enter are selected using GPA requirements and the process can start in semester V or VI, not following procedures like regular students in general.
3. Based on the Bachelor-Master Integration (PISM) program where prospective students who enter are selected using the GPA requirements and the process can start in semester III or IV, not following the procedure like regular students in general.
4. Based on cooperation contracts with several institutions, both Regional and Central Governments, and several domestic and foreign universities. Students who enter based on the cooperation contract are divided into 3 (three) programs, namely regular programs, 15-month programs or also known as P15/P18 and *Double Degree programs*.
5. Special programs such as international pathways and MBR

4.2.1 Qualifications of Prospective Students

The qualifications of prospective students will be explained based on each recruitment for each program path.

4.2.1.1 PWK Master's Regular Program (PM-PWK) with Research Thesis Lecture Path

The requirements for regular program students are as follows:

1. Graduates of undergraduate study programs (S1) that are accredited domestically or abroad which consist of the following categories:
 - a. Graduates of the S1 PWK Study Program who are members of the association of planning schools in the country or continent where the program is located, or
 - b. Graduates of other S1 Study Programs that are relevant to the field of PWK which can be proven by academic transcripts containing a minimum of 6 (six) credits of courses related to PWK, or
 - c. Graduates of other S1 Study Programs who are not relevant (do not teach PWK-related courses) but have at least 2 (two) full months of professional or official work experience in the field of PWK (equivalent to 320 working hours) with a minimum position as an expert assistant as evidenced by contracts/assignments and work outputs, or
 - d. Graduates of other S1 Study Programs who are not relevant but show outstanding academic achievements or abilities.
2. The average Cumulative Grade Point Average (GPA) is a minimum of 2.75 on a scale of 4, or 3.00 on a scale of 5.
3. The minimum value of Bappenas landfill is 475.
4. English language skills in the form of:
 - a. TOEFL iBT (recognized by ets.org) minimum of 56, or
 - b. A minimum TOEFL ITP (recognized by ets.org) of 475, or
 - c. A minimum TOEIC ([recognized by ets.org](https://ets.org)) of 500, or
 - d. IELTS (recognized by ielts.org) minimum of 5, or
 - e. ITB ELPT minimum of 77
5. Have the status of a study assignment (full exemption) from the home institution (if already employed)
6. Have certainty of financing sources until graduating from college

PM-PWK does not accept D4 graduate students. PM-PWK only accepts new students in odd semesters in several waves opened by SPs, and does not accept new students in even semesters.

4.2.1.2 Educational Cooperation Program

For participants of educational cooperation programs and participating in regular and P18 programs, general terms and conditions apply as in PM-PWK plus the provisions and selection mechanism set by the scholarship giver. The same applies to participants of *international class programs* (including *Double Degrees*) with educational cooperation scholarships.

For prospective individual *Double Degree* students (scholarships other than educational cooperation or non-scholarship) when applying, must show proof of ability/financial guarantee for 2nd year financing at a partner university.

4.2.1.3 Bachelor-Masters Unification Programme (PPSM)

Students of the PWK ITB Undergraduate Study Program who have graduated in 6 semesters with a minimum GPA of 3.5 can take part in the Bachelor-Master Unification Program (PPSM). By reporting

to TU PWK in semester 6, students can take courses at PM-PWK in semesters 7-8 with a *credit earning* mechanism of 6 credits per semester.

After graduating from the bachelor's degree (exam session), students can register administratively at ITB for the master's program, including applying for available scholarships. PPSM participants are exempt from the English proficiency test requirements and TPA.

4.2.1.4 Bachelor-Master's Integration Programme (PISM)

The qualifications and requirements for students to register for PISM are broadly the same as PPSM except for the provision of unification/integration time, minimum GPA and *credit earning* in each semester. At PISM, students who have graduated 4 or 5 semesters with a minimum GPA of 3 can register and participate in the program. The *credit earning* of PM-PWK in the next semester is 3 to 6 credits/semester.

4.2.1.5 International Special Programs

For prospective students who register for special international programs, general terms and conditions apply as in PM-PWK, with adjustments to English language skills as follows:

- a. TOEFL iBT (recognized by ets.org) minimum of 70, or
- b. A minimum TOEFL ITP (recognized by ets.org) of 530, or
- c. IELTS (recognized by ielts.org) minimum of 6, or
- d. After the requirements set by the partner institution

4.2.1.6 Master by Research Program

For participants of the Special Research-Based Program, general terms and conditions apply as in PM-PWK, with adjustments to GPA and English language skills as follows:

1. The average Cumulative Grade Point Average (GPA) is a minimum of 3.25 from a scale of 4, or 3.50 from a scale of 5.
2. English Language Proficiency in the form of:
 - a. TOEFL iBT (recognized by ets.org) minimum of 70, or
 - b. A minimum TOEFL ITP (recognized by ets.org) of 530, or
 - c. IELTS (recognized by ielts.org) minimum of 6, or
 - d. Experience as a lead author in international scientific publications

4.2.1.7 Master-Doctoral Unification Program (PPMD/PMDSU)

Students who can register for PPMD are PM-PWK students with very good achievements as evidenced and have high motivation to participate in doctoral programs. At or near the end of Semester II, students can start expressing their interest and be assessed with a minimum master's Cumulative Grade Point Average (GPA) of 3.50 from a scale of 4.

4.2.2 Student Admission Procedures

The procedure for accepting new students for **the regular** path in the PWK ITB Master's Program basically consists of 2 stages, namely:

1. **Administrative selection** is carried out centrally by ITB. At the administrative selection stage,

prospective new students are required to register according to the procedures set by ITB. The administrative files that must be completed are:

- S1 degree and transcript
- Health Description
- English language skills, such as TOEFL/IELTS
- Proof of Academic Ability/TPA
- Other administrative requirements set by ITB
- Course Equivalency Form (For prospective students from S1 graduates of other study programs relevant to the field of PWK) contains a minimum of 6 (six) credits of courses related to the basic competencies of PWK (space, fishing, social, economic, and institutional)
- Job portfolio (For prospective students who come from S1 graduates of other study programs and are not relevant to the field of PWK, but have professional or official work experience in the field of PWK or related to the basic competencies of PWK for at least 2 (two) full months (equivalent to 320 working hours) with a minimum position as an expert assistant as evidenced by contracts/letters of assignment and work outputs.)

After registering offline, prospective students must also submit physical evidence of all the document requirements directly to the ITB rectorate office. Furthermore, the administrative selection will be carried out by the head office (ITB). Once the results of the selection are out, all files will be given to each study program to be followed up through interviews.

2. **Interviews / interviews and written tests** are carried out at the level of the study program. This interview was conducted with the aim of finding out the motivation of students to register to study in the S2 PWK study program, and test basic skills regarding regional and urban planning. There are several important questions that will be assessed, namely: motivation of prospective students to study in the S2 PWK study program, work experience in the field of regional and urban planning, basic knowledge about regional and urban planning, sources of tuition financing (asked to ensure that the funds of students who will study are safe, so that there is no problem of study delays because students cannot afford tuition fees), Commitment in attending lectures is especially asked to prospective students who are working when registering, and other non-technical questions such as family factors whether it can be an obstacle to lectures or not. The results of the assessment from this interview stage are then submitted to the center or SPS (Postgraduate School) for follow-up.

Regarding scholarships for **PPSM and PISM**, the requirements proposed are different from the regular program, for S1 PWK students who have just graduated with a minimum GPA of 3.5. Meanwhile, for PPSM and PISM, the minimum GPA in the first year of master's study is 3.4. If this GPA requirement is not met, the PPSM and PISM scholarships given will be forfeited and students will no longer be able to attend lectures or move to become regular program students.

For prospective students from the **cooperation contract pathway**, they do not go through the interview selection stage, but only meet the same administrative requirements as the regular program. Other selections are carried out by the scholarship provider.

Meanwhile, for prospective MBR students, the registration process will generally be the same as the regular program and the difference is only in the curriculum structure. And unlike other programs, in the PWK master's international pathway, prospective students will be directed to register in accordance with the provisions imposed by the center as listed in [the admission.itb.ac.id](http://the.admission.itb.ac.id).

In addition to the general requirements above, there are also special requirements for the PWK S2 study program, which only accepts S1 graduate students, and does not accept D4 graduate students. PM-PWK only

Admitting new students in odd semesters only, and not accepting new students in even semesters.

Decision-making for new student admissions is entirely carried out by the Postgraduate School with input from interview results at the study program level. Decisions related to new student admissions will later consist of three decisions, namely:

1. Accepted
2. Accepted with conditions, because there are still administrative requirements that must be completed by prospective new students
3. Rejected

After students are accepted and before entering lectures, prospective students are required to take part in a pre-master's program that provides the basic materials/ *refreshers* needed to attend lectures. This material also replaces courses that were eliminated from the previous curriculum. Attendance of at least 80% is a requirement to obtain a certificate which is a requirement for re-enrolling in the master's program.

4.3 Load and Travel Time

The curriculum of the Master's Program is prepared according to the ITB Rector's Regulation No. 06/IT1. A/PER/2024 and Permendikbudristek No. 53/2023. Based on these regulations, the study load of the Master's program is at least 54 credits scheduled for four semesters and can be taken in less than / or four semesters and a maximum of six semesters including thesis preparation.

Broadly speaking, the curriculum load of the Master of Regional and Urban Planning Study Program is divided into two lecture paths that are opened, namely Research Thesis and MBR (Master *by Research*). The following is a table of the distribution of curriculum load in each track:

Table 4.1 Distribution of Curriculum Load of Study Programs

Type MK	Lecture Path	
	Research Thesis	MBR
MKWI	7 CREDITS	7 CREDITS
MKWP	9 CREDITS	9 CREDITS
MKOP	13 CREDITS	-
MKPB	18 credits	22 credits
Thesis	7 CREDITS	7 CREDITS
MK Research	-	9 CREDITS

4.4 Graduation Rules

The graduation rules of the Master Program in Regional and Urban Planning are broadly shown in Table 4.2.

Table 4.2 Study Program Graduation Rules

Credits Passed			IP minimal	Maximum study duration
W	P	Total		
23	31	54	3,001	3 years

1 Minimum grade of C.

After being declared passed, students will be given an academic diploma with an M.PWK degree, complete with academic transcripts and SKPI (Certificate of Diploma Companion) documents. Each of which is available in Indonesian and English.

4.5 Curriculum Structure

As previously explained that the curriculum load of the Master's Program is divided into two lecture paths that are opened, the alignment of the curriculum structure will be discussed to complete the explanation of each available path, including regular pathway programs, specifically MBR, and cooperation in the form of *double degree* and multidisciplinary. In the regular program, the course structure is divided into compulsory study program courses and study program option courses.

4.5.1 Master's Curriculum Structure Based on Lectures with Research Thesis

For students with a lecture-based master's path with a final project (thesis) of research, the curriculum structure consists of a combination of:

- 1) MKWI and MKWP (total) : 23 credits Table 4.3
- 2) MK Options : 13 credits Table 4.4 to 4.9
- 3) MKPB : 18 credits Table 4.11 or MK outside MK Selected options
- Total : 54 credits

The MK Study Program Options opened (Table 4.4 to 4.9) is a package of specialization courses consisting of MK theory (3 credits) and MK theory with practicum (4 credits), each of which builds a sub-CPL-2 (Table 3.3). Students with this Research Thesis lecture basis are welcome to choose one of the available options (specialization).

Table 4.3 Structure of Compulsory Courses for Study Programs and ITB

Semester I					Semester II				
Yes	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5108	Planning Theory	3	-	1	PL5208	Methodology Research	3	-
2	PS5003	Digital Literacy and Academic Ethics	2	-	2	PL6209	Studio Thematic Planning	6	3
		Total	5				Total	9	3
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
					1	PL6091	Thesis	7	
					2	PL6092	Master's Session	2	
							Total	9	

As the Study Program has six elective paths, each consisting of 13 credits. The following is the structure of the Study Program Option Course (MKOP) in each chosen path. In some cases, students may not be able to take the complete MKOP package from one of the packages, so they can complete a total of up to 54 credits after passing all MKWI and MKWP.

Table 4.4 Urban Planning MKOP

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5112	Urban Development Planning	3	-	1	PL6215	Land Development and Settlements	4	2
2	PL6113	Planning Urban Amenities	3	-					
		Total	6	-			Total	4	2
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5113	Control Urban Development	3	-					
		Total	3	-					

Table 4.5 MKOP Sustainable Regional Development

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5122	Regional Development Kontemporer	3	-	1	PL5123	Environment and Sustainability	3	-
2	PL6125	Region Modeling	4	2	2	PL6223	Transformasi Rural	3	-
		Total	7	2			Total	6	-

Table 4.6 MKOP Infrastructure and Transportation Systems

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5132	Infrastructure and Transportation Systems	3	-	1	PL5232	Planning Infrastructure and Transportation	3	-
2	PL6135	Planning Analysis Methods Infrastructure and Transportation	4	2					
		Total	7	2			Total	3	-
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL6133	Pengelolaan Infrastructure and Transportation	3	-					
		Total	3	-					

Table 4.7 Urban Governance MKOP

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5142	Governance Urban	3	-	1	PL5243	Conflict Management	3	-
2	PL6145	Policy Analysis Audience	4	2	2	PL6243	Land Management Urban	3	
		Total	7	2			Total	3	-

Table 4.8 MKOP Disaster Management Planning

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5152	Disaster Management and Change Adaptation Iklim	3	-	1	PL5253	Community-Based Disaster Adaptation and Mitigation	3	-
2	PL6165	Information and Geo-Spatial Technology for Disaster Mitigation	4	2					
		Total	7	2			Total	3	-
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL6153	Disaster Mitigation and Change Adaptation Policy Iklim	3	-					
		Total	3	-					

Table 4.9 MKOP Innovation Systems and Smart Cities

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5162	Computational Thinking and Data Science	3	-	1	PL6265	Urban Analytics	4	2
2	PL5163	Innovation System and Urban Concept Intelligent	3	-					
		Total	6	-			Total	4	2
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL6163	System Design and Infrastructure 4.0	3	-					
		Total	3	-					

4.5.2 Research-Based Master's Curriculum Structure

Students who take *the Master by Research* continue to take MKWI and MKWP as stated in Table 4.3. It's just that students in this lecture path do not need to take the MKOP package like students in the Research Thesis lecture path. PM-PWK opens *placeholder courses* as shown in Table 4.10 for the implementation of mandatory research MKs with a total of 16 credits (7 thesis credits and 9 pre-thesis credits) as well as placeholder MKs selected for research support. Through *this MK placeholder*, students build the same substantive competencies as regular students, but the difference is in the implementation. MBR students do not take the Constitutional Court but more intensively study topics in one or a combination of elective paths under the guidance of lecturers in the Expertise Group or Research Center.

Table 4.10 Course Structure for Master's Pathway Students by Research

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5108	Planning Theory	3	-	1	PL6209	Studio Thematic Planning	6	3
2	PL5071	Research Ideas Planning	3	-	2	PL5208	Methodology Research	3	-
3	PL5004	Research Paper Writing (MKPB 1)	3	-	3	PL6201	Planning Research Internship	3	-
4	PL5072	Independent Study I (MKPB2)	3	-	4	PL6201	Independent Study II (MPKB 4)	4	-
5	PS5003	Digital Literacy and Academic Ethics	2	-	5		MKPB 5	3	-
6		MKPB 3	3	-					
		Total	17				Total	19	3
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL6073	Research Progress Planning	3	-	1	PL6091	Thesis	7	-
2	PL6075	Publications in International Journals (MKPB 6)	3	-	2	PL6092	Master's Session	2	-
		MKPB 7	3						-
		Total	9				Total	9	

For MKPB 3, 4, 5 and 7, it is recommended to meet it from the following unstructured MK list, or from the list of other MKOP/MKPB if students are interested:

- 1) PL5072 Independent Study I
- 2) PL6074 Independent Study II
- 3) PL5075 Planning Research Management
- 4) PL5076 Presentation at Scientific Conference

4.5.3 Structure Curriculum To Program Special Double Degree/Exchange

In addition to the opening of regular programs, the PWK Master Study Program also holds a special program consisting of a *Double Degree Program (DD)/Student Exchange* with a structure that can be seen in Table 4.11. Double Degree/Exchange students continue to take MKWI and MKWP in full, with the Thesis and Master's Session being guided and assessed jointly between ITB and PT partners. Double Degree/Exchange students are not required to take the complete elective/MKOP path because in the second year they will undergo education at PT Mitra abroad. However, students are directed to take one of the optional paths with compulsory courses Japil 4 with the code PL61X3 taken in semester 1.

Table 4.11 Course Structure of *Special Dual Degree/Exchange Programs*

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5108	Planning Theory	3	-	1	PL5208	Methodology Research	3	-
2	PS5003	Digital Literacy and Academic Ethics	2	-	2	PL5209	Studio Thematic Planning	6	3
3	PL61X3	One of the MKOP	4	2	3		MKOP/MKPB	3	
4		MKOP/MKPB	3		4		MKOP/MKPB	3	
5		MKOP/MKPB	3		5		MKOP/MKPB	3	
6		MKOP/MKPB	3						
		Total	18	2			Total	18	3
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
	<i>Learning at PT Mitra</i>					<i>Learning at PT Mitra</i>			
					1	PL6091	Thesis	7	-
					2	PL6092	Master's Session	2	-
							Total	9	

In addition to cooperation programs in the form of *double degrees*, internal academic cooperation in the form of multidisciplinary between faculties is also available at ITB. The multidisciplinary programs opened by SAPPK are *the multidisciplinary programs Creativity Based, Smart X, and Disaster*. The curriculum structure for each multidisciplinary program is contained in subchapter 5.1. In principle, students participating in multidisciplinary programs who are accepted through PM-PWK, must take MKWI and MKWP in this study program, as well as MKOP who are partners with other faculties.

In addition to taking courses according to the structure offered in the regular and *double degree* pathways, students must also take elective courses to meet the study load. Students can take compulsory elective courses outside of their own elective paths as elective courses.

Table 4.12 List of Elective Courses

Odd and/or Even Semesters			
No	Code	Course Name	CU
<i>Global and Local Contemporary Issues</i>			
1	PL5001	Geo-Information Science and Modeling	3
2	PL5002	Utilization of Earth Observation for Planning	3
3	PL5003	Contemporary Topics in Planning	3
4	PL 5004	Spatial Economics	3
5	PL 6008	Data Integration for Planning	3
6	PL6009	International Studio on Planning and Design in Southern Earth	4
7	PL6021	Development of Coastal Areas and Maritim	3
8	PL6022	Regional Urbanization	3
9	PL5206	Development Institutions	3
<i>Research in the Field of Regional and Urban Planning</i>			
10	PL 5005	Research Paper Writing	3
11	PL 5071	Planning Research Ideas	3
12	PL 6071	Planning Research Internship	3
13	PL 6073	Progress of Planning Research	3
14	PL5072	Independent Study I	3
15	PL6074	Independent Study II	4
16	PL5075	Planning Research Management	3
17	PL5076	Presentation at Scientific Conference	3
18	PL6075	Publications in International Journals	3
<i>Supporting Regional and Urban Planning Professionals</i>			
19	PL5077	Planning Competitions/Competitions	3
20	PL5073	Project Experience Planning Professionals	3
21	PL5074	Planning Learning Management	3
Total			65

4.6 Curriculum Roadmap

The roadmap of student competency achievement is used as a reference for course placement and a benchmark for the success of educational implementation. The learning stages start from strengthening contemporary theories, concepts, and principles in planning that will be applied in semester 1. Then it was continued with reinforcement in conducting analysis and application of theories and methods in complex planning in the second semester (2). The last stage is that students are expected to be able to carry out research in the field of planning specialization selected in semesters three (3) and four (4). Broadly speaking, *the curriculum roadmap* can be seen in the following flow chart.

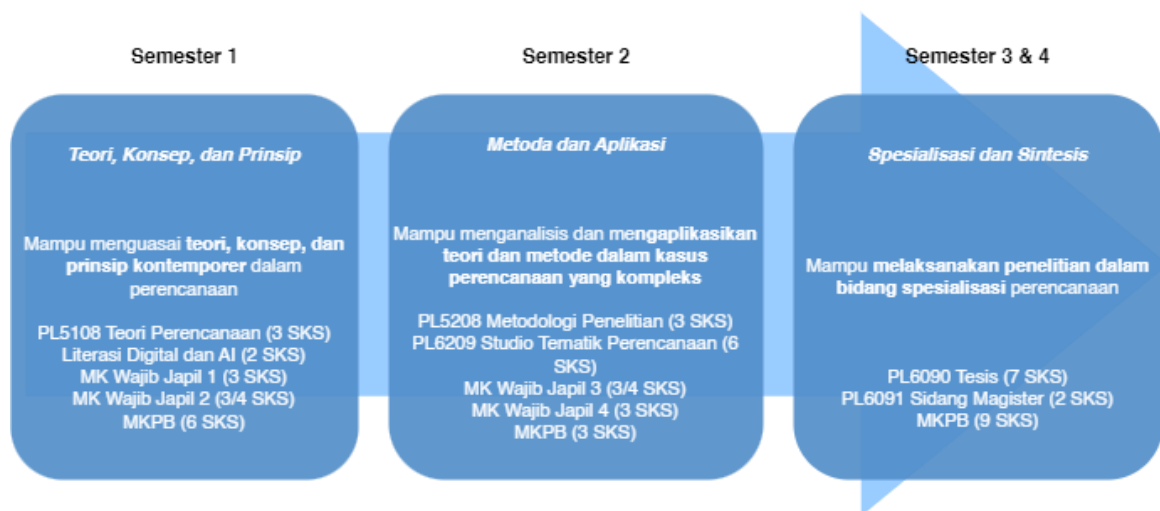


Figure 4.1 Roadmap of Competency Achievements of MPWK ITB Study Program

The course roadmap for each lecture path is presented as follows:

- 1) Research thesis lecture path in Figure 4.2
- 2) Research-Based Master's Track in Figure 4.3
- 3) Special Programs for Double Degree/Exchange in Figure 4.4.

	Semester 1	Semester 2	Semester 3	Semester 4
MKWP	PL5108 Teori Perencanaan (3 SKS)	PL6209 Studio Tematik Perencanaan (6 SKS)		
MKPB	MK Pilihan (6 SKS)	MK Pilihan (6 SKS)	MK Pilihan (6 SKS)	
MKOP	PL51X2 MK Wajib Jalur Pilihan 1 (3 SKS) PL51X3 MK Wajib Jalur Pilihan 2 (4 SKS)	PL62X5 MK Wajib Jalur Pilihan 3 (3 SKS)	PL61X3 MK Wajib Jalur Pilihan 4 (3 SKS)	
MKWI	PS5005 Literasi Digital dan AI (2 sks)	PL5208 Metodologi Penelitian (3 SKS)	PL6091 Tesis (7 SKS) PL6092 Sidang Magister (2 SKS)	
SKS	18	18	18	

Tanda panah merah **TIDAK** menunjukan mata kuliah pre-requisite

Figure 4.2 Roadmap for the Research Thesis Pathway Lecture Scheme

	Semester 1	Semester 2	Semester 3	Semester 4
MKWP	PL5108 Teori Perencanaan (3 SKS)	PL6209 Studio Tematik Perencanaan (6 SKS)		
MKPB	MK Pilihan (3 SKS) PL5072 Studi Mandiri I (3 sks)	MK Pilihan (3 SKS) PL6074 Studi Mandiri II (4 sks)	MK Pilihan (6 SKS)	
MK Penelitian	PL5071 Gagasan Riset Perencanaan (3 sks)	PL6201 Magang Riset Perencanaan (3 sks)	PL6073 Kemajuan Riset Perencanaan (3 sks)	PL6075 Publikasi pada Jurnal Internasional (3 sks)
MKWI	PS5005 Literasi Digital dan AI (2 sks)	PL5208 Metodologi Penelitian (3 SKS)	PL6091 Tesis (7 SKS) PL6092 Sidang Magister (2 SKS)	
SKS	17	19	18	

Tanda panah merah **TIDAK** menunjukkan mata kuliah pre-requisite

Figure 4.3 Roadmap for the Research-Based Master's Pathway Lecture Scheme

	Semester 1	Semester 2	Semester 3	Semester 4
MK Wajib Prodi	PL5108 Teori Perencanaan (3 SKS)	PL6209 Studio Tematik Perencanaan (6 SKS)	Perkuliahan di Perguruan Tinggi Mitra	
MKOP/ MKPB	MK Pilihan (6 SKS) PL51X2 MK Wajib Jalur Pilihan 1 (3 SKS) PL51X3 MK Wajib Jalur Pilihan 2 (4 SKS)	MK Pilihan (6 SKS) PL62X5 MK Wajib Jalur Pilihan 3 (3 SKS)		
MK Wajib ITB	PS5005 Literasi Digital dan AI (2 sks)	PL5208 Metodologi Penelitian (3 SKS)		
SKS	18	18		

Tanda panah merah **TIDAK** menunjukkan mata kuliah pre-requisite

Figure 4.4 Roadmap for Double Degree/Exchange Special Programme Schemes

In the maintenance of the curriculum structure, it was found that there was a linkage between several courses. The relationship in question is that in the form of *pre-requisite* or taking certain courses, they must first meet the requirements for completing other courses. In addition, there is also a connection in the form of *co-requisite* or the existence of courses that must be taken at the same time.

Table 4.13 Linkages of Study Program Courses

Yes	Code	Name Matakuliah	Characteristic	<i>Pre-requisite</i>	<i>Co-requisite</i>
1	PL6091	Thesis	MKWI	PL5208 Research Methodology	
2	PL6092	Master's Session	MKWI	PL5208 Research Methodology	

4.7 Summit Lectures and Final Projects

Thesis is a synthesis course that serves as a vehicle for students to apply the knowledge and skills they have gained to the master's program in an academic research that is carried out independently under the guidance of lecturers. Although carried out independently, thesis research requires intensive interaction between students and supervisors in the form of scientific discussions through face-to-face, e-mail, written materials, etc. With a load of 7 credits, it means that the thesis is done in a total of 288-480 working hours, or 18-30 hours per week for one semester.

In accordance with the ITB PTBH Academic Regulations, the quality of the Thesis for the Master's Program must meet at least the following criteria:

1. Displaying the individual capacity of the author in conducting independent research,
2. Presenting data, analysis, synthesis, and criticism of literature in accordance with quality scientific rules and ethics,
3. Demonstrate originality in terms of ideas/ideas and writing,
4. Display valuable scientific contributions (original, scientific, or patent, or prototype new inventions), and
5. Encourage further scientific activities.

With this standard, PM-PWK student thesis must be a study of issues related to a specific field in regional and urban planning that has a uniqueness by applying a theory, concept, method and/or technique. The topics taken can be explored from various issues studied in the chosen path.

The purpose of the Thesis at PM-PWK is for students:

1. Able to write research sequentially, logically and follow the correct rules of academic writing.
2. Able to demonstrate a critical attitude towards the theories, concepts, methods and/or techniques studied that have the potential to be published as articles at least in accredited national journals or equivalent.

To demonstrate this critical attitude, students must be able to conduct a critical literature review, so that they can position the problems being researched in existing scientific debates, critically explain the knowledge that has been formed related to research topics based on research that has been carried out or based on theories that have been developed, and develop a solid conceptual framework to analyze the problem. The data used can be in the form of primary data, secondary data and/or documents relevant to the study subject.

5 LEARNING SCHEME

In addition to the regular learning scheme, the study program also provides other forms of schemes including integration between one-time programs, integration between levels, and special. In the one-time program integration scheme, several schemes are available, including multidisciplinary and *double degree*. Furthermore, in the inter-level integration scheme, there are regular schemes, PPSM, PISM, and the Master-Doctoral Unification Program (PPMD). Meanwhile, in the special scheme, there are international routes and P15/P18 cooperation.

5.1 Integration Scheme Between Programs Sejenjang

In this scheme, the integration of one-time programs is carried out based on cooperation between academic organizers both internally and externally at ITB. Internally this cooperation/collaboration is prepared in a multidisciplinary scheme, while externally it is available in a *double degree scheme*.

5.1.1 Multidisiplin

As a collaboration carried out with STEI, FSRD, and FITB. SAPPK in the PWK master's program opens a multidisciplinary scheme with 3 options:

1. *Creativity Based Regional Development* (x FSRD)
2. *Smart X* (x STEI)
3. *Disaster* (x FITB)

The three scheme options opened by PM-PWK offer a multidisciplinary academic experience with a study load division of 70% of PWK disciplines and 30% partner disciplines. In detail, the curriculum structure for each choice of multidisciplinary scheme is as follows.

For programs where the *intake* is PM-PWK, students must take MKWI, MKWP and MKOP related to PM-PWK in full.

Creativity Based Regional Development (x FSRD)

Table 5.1 Multidisciplinary Scheme "Creativity-Based Regional Development" with MPWK Student Intake

Semester I					Semester II				
Yes	Code	Course Name	CU	p	Yes	Code	Course Name	CU	p
1	PL5123	Regional Development Kontemporer	3	-	1	PL6209	Planning Thematic Studio	6	3
2	PL 5108	Planning Theory	3	-	2	PL5208	Research Methodology	3	-
3	DS....	Design Theory I	3	-	3	PL5122	Environment and Sustainability	3	-
4	PL6125	Region Modeling	4	2	4	PL6123	Rural Transformation	3	-

5		MK Free Choice	3	-	5	DS....	Development Community & Creative Industry	3	-
6	PS5003	Digital Literacy and Academic Ethics	2	-					
		Total	18				Total	18	3
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	DS....	Social History of Design	3	-	1	PL6091	Thesis	7	-
2	DS....	Design and Culture I	3	-	2	PL6092	Master's Session	2	-
						DS....	Design Innovation	3	-
		Total	6				Total	12	

Table 5.2 "Design Leadership" Multidisciplinary Scheme with FSRD Student Intake

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	DS....	Design Theory I	3		1	DS....	Sustainable Design	3	
2	DS....	Research Information Management	3		2	DS....	Design and Human Factors	3	
3	DS....	Social History of Design	3		3	DS....	Design Research Methods	3	
4	PS5003	Digital Literacy, AI & Academic Ethics	2		4	DS....	Final Project Proposal Exam	1	
5	DS....	Final Project Exam	1		5	PL6123	System and Infrastructure Design 4.0	3	
6	PL6245	Public Policy Analysis	4	2	6	PL5122	Environment and Sustainability	3	
7		MKPB	3						
		Total	19				Total	16	
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	DS....	Design/Craft Project Review	4		1	DS....	Final Project Design/Craft	4	
2	DS....	Thinking Out and Innovation	3		2	DS....	Final Project Session Design / Craft	3	
3	DS	Seminar (Theory and Methodology)	2						

4	PL5123	Development Contemporary Territory	3						
		Total	12				Total	7	

Smart X (x STEI)

Table 5.3 "Smart City" Multidisciplinary Scheme with MPWK Student Intake

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5108	Planning Theory	3	-	1	PL5207	Research Methodology	3	-
2	PL5162	Computational Thinking and Data Science	3	-	2	PL6265	Urban Analytics	4	2
3	PL5163	System Concept Innovation and Smart Cities	3	-	3	PL6209	Planning Thematic Studio	6	3
4	PS5003	Digital Literacy and Academic Ethics	2	-	4	IF5230	Application Intelligence Made for Enterprise	3	-
5	IF5132	Information Systems Sustainability	3	-	5	EL5057	Sensing System	2	-
6	IF5131	Systems Approach	2	-	6		MK Free Choice	3	
		Total	16				Total	19	5
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL6163	System and Infrastructure Design 4.0	3	-	1	PL6091	Thesis	7	-
2	IF5130	Digital Strategy	2	-	2	PL6092	Master's Session	2	-
		MK Free Choice	3			DS6208	Design and Human Factors II	2	-
		Total	8				Total	11	

Table 5.4 "Smart City" Multidisciplinary Scheme with STEI Student Intake

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	IF5100	Programming for Data Analytics	3		1	IF5099	Methodology Research	3	
2	IF5130	Digital Strategy	2		2	IF5200	Research Project Terapan	3	
3	IF5131	Systems Approach	2		3	IF5230	Artificial Intelligence Applications for Enterprise	3	
4	IF5132	Sustainability Information	3		4	EL5057	Sensing System	2	

		Systems							
		MK Free Choice	10		6	PS5003	Digital Literacy and Academic Ethics	2	
		Total	18				Total	13	
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	IF6130	Data Storage	2		1	PL6213	Land and Housing Development	4	2
2	IF6099	Thesis	6		2	PL6214	Urban Development Control	3	
3	PL5111	Urban Development Planning	3		3	DS6208	Design and Human Factors II	2	
4	PL6212	Urban Facilities Planning	3						
		Total	14				Total	9	2

Disasters (x FTSL and FITB)

Table 5.5 "Disaster" Multidisciplinary Scheme with MPWK Student Intake

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL 5108	Planning Theory	3	-	1	PL 5208	Research Methodology	3	-
2	PL5152	Disaster Management and Climate Change Adaptation	3	-	2	PL6243	Community-based Disaster Adaptation and Mitigation	3	-
3	PL6165	Information Technology and Geo-Spatial in Disaster Mitigation	4	2	3	PL 6209	Planning Thematic Studio	6	3
4	PS5003	Digital Literacy and AI	2	-	4	GD	Disaster Risk Observation System	3	-
5	GD...		3	-	5	THE		3	-
6	THE...		3	-					
		Total	18	2			Total	18	3
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL6153	Disaster Mitigation and Climate Change Adaptation Policy	3	-	1	PL6091	Thesis	7	-
2	ME/OS		3	-	2	PL6092	Master's Session	2	-
					3	ME/GD		3	-

		Total	6				Total	12	
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For prospective students who are interested in choosing this scheme, the requirements that must be met are the same as the entry requirements for the regular scheme as contained in subchapter 4.2.

5.1.2 Double Degree

In addition to being multidisciplinary, integration cooperation at the same level is also available in the *double degree scheme*. Students who are registered in this scheme will undergo education for the first 1 year (2 semesters) at PWK ITB and the next 1 year (2 semesters) at partner universities. The detailed curriculum structure for the *double degree scheme* is contained in subchapter 4.4.

For prospective students who are interested in choosing this scheme, the requirements that must be met are broadly the same as the entry requirements for the regular scheme as contained in subchapter 4.2, with adjustments to GPA and English language proficiency which are the same as the entry requirements for special research-based programs (*Master by Research*) in subchapter 4.1.1.6.

Tabel 5.6 Skema Double Degree

Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5108	Planning Theory	3	-	1	PL5208	Methodology Research	3	-
2	PS5003	Digital Literacy and Academic Ethics	2	-	2	PL5209	Studio Thematic Planning	6	3
3	PL61X3	One of the MKOP	4	2	3		MKOP/MKPB	3	
4		MKOP/MKPB	3		4		MKOP/MKPB	3	
5		MKOP/MKPB	3		5		MKOP/MKPB	3	
6		MKOP/MKPB	3						
		Total	18	2			Total	18	3
Semester III					Semester IV				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
	<i>Learning at PT Mitra</i>					<i>Learning at PT Mitra</i>			
					1	PL6091	Thesis	7	-
					2	PL6092	Master's Session	2	-
							Total	9	

5.2 Inter-Level Integration Scheme

In the inter-level integration scheme, it is known that there are several possible schemes that occur, namely:

1. General scheme for Bachelors-Masters
2. Bachelor-Masters Programme Consolidation Scheme (PPSM)
3. Scheme of the Bachelor-Master Integration Programme (PISM)
4. Master-Doctoral Programme Consolidation Scheme (PPMD)

5.2.1 General Scheme for the Consolidation of Bachelor's-Master's Programs

For the PM-PWK general scheme, the criteria for prospective students can be differentiated based on the similarity of the S1 field/discipline they have. The following are the conditions that must be met for prospective students in the general scheme to be registered as students:

1. Graduates of the S1 PWK Study Program who are members of the planning school association in the country or continent where the program is located as evidenced by academic transcripts and interview confirmations, or
2. Graduates of other S1 Study Programs that are relevant to the field of PWK can be proven by academic transcripts containing a minimum of 6 (six) credits of courses related to the basic competencies of PWK (spatial, physical, environmental, social, economic, and institutional) and interview confirmation, or
3. Graduates of S1 other study programs who are not relevant (do not teach courses related to PWK) but have professional or official work experience in the field of PWK or related with a minimum of 2 (two) full months of PWK competencies (equivalent to 320 working hours) with a minimum position as an expert assistant as evidenced by contracts/assignment letters and work outputs.

Broadly speaking, academic learning activities for students in the same field and non-field will be the same. Meanwhile, an additional provision for non-field students is that it is mandatory to take the MK Studio of Regional and Urban Planning outside the compulsory courses they have. The detailed curriculum structure for this scheme is contained in subchapter 4.4.

5.2.2 Unification of Bachelor's and Master's Programmes (PPSM)

To register for the PPSM scheme, the provisions that must be met have been contained in subchapter 4.2. This scheme can only accommodate students in the same faculty, namely SAPPK. The following is the curriculum structure of the PPSM scheme.

Table 5.7 PPSM Structure – Research Thesis

Semester 7					Semester 8				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1		MKOP 1/ MKPB 1	3	-	1	PL5208	Methodology Research	3	-
2		MKOP -2/ MKPB -2	3	-	2		MKOP -4/ MKPB -4	3	-
3		MKPB -3	3	-	3		MKPB -5	3	-
		Total	9				Total	9	
Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	sks6	p
1	PL5108	Planning Theory	3	-	1	PL6209	Planning Thematic Studio	6	3
2		MKOP -3	4	2	2	PL6091	Thesis	7	-
3	PS5003	Digital Literacy and Academic Ethics	2	-	3	PL6092	Master's Session	2	-
4		MKOP -1/ MKPB -1	3	-	4		MKOP -4/ MKPB -4	3	-
5		MKOP -2/ MKPB -2	3	-					

6		MKPB -6	3	-					
		Total	18	2			Total	18	3

Table 5.8 PPSM – MBR Structure

Semester 7					Semester 8				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5071	Research Ideas	3	-	1	PL5208	Methodology Research	3	-
2	PL5004	Research Paper Writing (MKPB 1)	3	-	2		Self-Study 1 (MKPB 3)	3	-
3		MKPB 2	3	-	3	PL6201	Planning Research Internship	3	-
		Sum	9				Sum	9	
Semester I					Semester II				
No	Code	Course Name	CU	p	No	Code	Course Name	sks6	p
1	PL5108	Planning Theory	3	-	1	PL6209	Planning Thematic Studio	6	3
2		Self-Study 2 (MKPB 4)	4	2	2	PL6091	Thesis	7	-
3	PS5003	Digital Literacy and Academic Ethics	2	-	3	PL6092	Master's Session	2	-
4	PL6073	Progress of Planning Research	3	-	4		International Publications (MKPB 7)	3	-
5		MKPB 5	3	-					
6		MKPB 6	3	-					
		Sum	18	2			Total	18	3

5.2.3 Bachelor-Master's Integration Programme (PISM)

To register for the PISM scheme, the conditions that must be met have been contained in subchapter 4.2. Different from PPSM, this scheme can accommodate students across faculties, so there are 3 possibilities, namely:

1. S1 PWK – S2 PWK
2. S1 ES – S2 PWK
3. S1 Non SAPPK – S2 PWK

Broadly speaking, the general criteria and requirements for participating in PISM are as follows.

1. Valid for students in semesters 3, 4, and after
2. Those who register at the end of semester 3 have completed the undergraduate program ≥ 36 credits with a score of $\geq C$ and $NR \geq 3$ from the Constitutional Court that has been completed.
3. Those who register at the end of semester 4 have completed the undergraduate program ≥ 56 credits with a score of $\geq C$ and $NR \geq 3$ from the Constitutional Court that has been completed.
4. Obtain approval from the guardian lecturer
5. Students have passed the Joint Preparation Stage (TPB)

In addition, specifically for non-PWK students, there are 2 additional provisions in the form of:

1. Take a pre-master's degree first before semester 9 (semester 1 of the master's degree) begins
2. Take MK minor PWK a total of 18 credits before semester 9 (semester 1 master's) starts

The following is the curriculum structure of the PISM scheme:

Table 5.9 PISM Structure – Research Thesis (starting from Semester 5)

Semester 5					Semester 6				
No	Code	Course Name	CU	p	Yes	Code	Course Name	CU	p
1		Japil-2/Pil-2	3	-	1		Japil-4/Pil-4	3	-
		Sum	3	-			Sum	3	-
Semester 7					Semester 8				
No	Code	Course Name	CU	p	No	Code	Course Name	sks6	p
1		Japil-1/Pil-1	3	-	1	PL5208	Research Methodology	3	-
2		GDP-3	3	-	2		GDP-5	3	-
		Sum	6				Sum	6	
Semester 1					Semester 2				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5108	Planning Theory	3	-	1	PL6209	Planning Thematic Studio	6	3
2		Japil-3	4	2	2	PL6091	Thesis	7	-
3	PS5003	Digital Literacy and Academic Ethics	2	-	3	PL6092	Master's Session	2	-
		Japil-1/Pil-1	3	-			Japil-4/Pil-4	3	1
		Japil-2/Pil-2	3	-					
		Pil-6	3	-					
		Sum	18	2			Sum	18	3

Table 5.10 PISM Structure – Research Thesis (starting from Semester 6)

					Semester 6				
					No	Code	Course Name	CU	p
					1		Japil-4/Pil-4	3	-
					2		Japil-2/Pil 2	3	-
							Sum	6	-
Semester 7					Semester 8				
No	Code	Course Name	CU	p	No	Code	Course Name	sks6	p
1		Japil-1/Pil-1	3	-	1	PL5208	Research Methodology	3	-
2		GDP-3	3	-	2		GDP-5	3	-
		Sum	6				Sum	6	
Semester 1					Semester 2				
No	Code	Course Name	CU	p	No	Code	Course Name	CU	p
1	PL5108	Planning Theory	3	-	1	PL6209	Planning Thematic Studio	6	3
2		Japil-3	4	2	2	PL6091	Thesis	7	-

3	PS5003	Digital Literacy and Academic Ethics	2	-	3	PL6092	Master's Session	2	-
		Japil-1/Pil-1	3	-			Japil-4/Pil-4	3	1
		Japil-2/Pil-2	3	-					
		Pil-6	3	-					
		Sum	18	2			Sum	18	3

In addition to PISM – Research Thesis, PISM is also available for the MBR pathway. The difference in curriculum structure between the Research Thesis and MBR pathways lies in the change of 7 MKs (MKOP and MKPB) in the Research Thesis pathway replaced by the following MKs:

1. Research Ideas
2. Self-Study 1
3. Self-Study 2
4. Research Paper Writing
5. Research Internship
6. Research Progress
7. Publications in International Journals

5.2.4 Consolidation of Master-Doctoral Programme (PPMD)

In the inter-level integration scheme, study programs also have integration options with higher levels, in the form of the Unification of the Master-Doctoral Program (PPMD) and the Superior Undergraduate Master-Doctoral Program (PMDSU) which encourages students to complete their Master's and Doctoral Degrees within four years. PM-PWK students who are interested or accepted into the PPMD program are directed to take the Research-Based Master's (MBR) path and take a number of MKs for the Doctoral Study Program in Regional and Urban Planning since Semester 3. The requirement to take part in PPMD is a minimum GPA of 3.5.

Through the PPMD program, in the third semester, PWK master's program students can start taking PWK doctoral program courses at the same time. This allows PPMD program students to get Master's and Doctoral degrees for 4 (four) years of study. The number of credits taken each semester also follows the standard of study load allowed by ITB. The obligation of the number of credits at the master's and doctoral levels can also be fulfilled in this scheme, which is 54 credits and 68 credits. Some of the compulsory courses in the doctoral program curriculum can also be shared (integrated) with master's program courses, such as MK PLXXXX Theory of Contemporary Regional and Urban Planning, and MK PLXXXX Research Methodology whose substance has been obtained in the curriculum menu of the master's program. The consequence is that PPMD program students get the option to take more doctoral elective courses than the regular program. Regarding the technical implementation of the PPMD program curriculum, it will be further regulated in the POS PD-PWK document. In addition, it should be noted that the provisions of the curriculum structure for the PPMD program are *agile* (agile), where the name and course code of the master's program will adjust to changes that may occur in the PWK Master's curriculum.

The curriculum structure for the PPMD scheme is presented in the following table.

Table 5.11 PPMD/PMDSU Structure

Jenis MK	Smt 1	Smt 2	Smt 3	Smt 4	Smt 5	Smt 6	Smt 7	Smt 8
MK Wajib Prodi	Teori Perencanaan (3 SKS)	Studio Tematik Perencanaan (6 SKS)	Teori Perencanaan Wilayah dan Kota Kontemporer (6 SKS)					
MK Wajib ITB	Gagasan Riset (3 SKS)	Metodologi Penelitian (3 SKS)	Metodologi Penelitian (3 SKS)	Penyusunan Proposal (5 SKS)	Penelitian Doktorat I (8 SKS)	Penelitian Doktorat II (8 SKS)	Penelitian Doktorat III (8 SKS)	Penelitian Doktorat IV (8 SKS)
	Literasi Digital (2 SKS)	Magang Riset (3 SKS)	Ujian Kualifikasi (3 SKS)	Filsafat Ilmu Penegetahuan (2 SKS)	Seminar Kemajuan I (2 SKS)	Seminar Kemajuan II (2 SKS)	Seminar Kemajuan III (2 SKS)	Penulisan Disertasi (2 SKS)
			Literasi Digital, AI, Etika Akademik (2 SKS)	Tesis (7 SKS)				Sidang Doktor (3 SKS)
				Sidang Magister (2 SKS)				
MK Pilihan	Penulisan Makalah Penelitian (3 SKS)	Studi Mandiri (4 SKS)	Kemajuan Riset (3 SKS)		*MK Pilihan Doktor (5 SKS)	*MK Pilihan Doktor (5 SKS)		
	*MK Pilihan-1 Magister (3 SKS)	*MK Pilihan-2 Magister (3 SKS)		*MK Pilihan-3 Magister (3 SKS)				
	Studi Mandiri 1 (3 SKS)		Publikasi Internasional (3 SKS)					
Total SKS Magister (54 SKS)	17	19	6	12				
Total SKS Doktor (74 SKS)			14	7	15	15	10	13

6 LEARNING DEVELOPMENT

6.1 Courses and Study Materials

In PM-PWK, the study materials are built based on knowledge stems intended to answer the learning outcomes of graduates, which consist of:

- Planning Theory, which includes the ethics of the planning profession,
- The planning aspects, which are explored in each specialty, consist of the environment, economic, social and population, spatial and infrastructure systems, as well as institutions in the field of planning specialisation,
- Planning methods, both qualitative and quantitative data analysis methods, spatial analysis, evaluation methods and decision analysis in the field of planning specialization, and
- Research in the field of planning specialization.

Table 6.1 General Category Study Materials

No	BK Code	Study Materials	Learning Materials
1	TP1	Planning Theory	In accordance with the competency standards and learning outcomes at the master's level, planning theory is the <i>core</i> of learning planning concepts, theories and principles. The material of this study is mainly the theory of procedural planning ranging from classical to contemporary, as well as the ethics of the planning profession.
2	AP1	Milieu	Environmental studies refer to global goals and environmentally friendly principles in the development of cities and regions, especially in the areas of specialization of each each
3	AP2	Economics	The economic material delivered at the master's level is contextualized with regional development and city in the field of specialization
4	AP3	Social and Population	The social and population material presented for the master's level is not delivered independently but is associated with the context of regional development and city in the field of specialization
5	PS4	Spatial Systems and Infrastructure	Spatial and infrastructure analysis techniques include theory, practice, and space management for development both regionally and urbanly in the field of specialization
6	AP5	Institutional	The linkages between institutions, policy decisions, and financing in the management of regions and cities are Basic material at the master's level in the field of specialization
7	MP1	Planning Methods	Analytical methods used in planning, including quantitative/modeling methods, qualitative methods, and spatial and policy analysis. In this study material, the use of <i>tools</i> that help analysis in the field of specialization.

No	BK Code	Study Materials	Learning Materials
8	RS1	Planning Research	Philosophical studies and supporting skills in conducting research in the field of regional and urban planning specialization. Study materials cover methodology research, development of research topics/ideas, management of research projects and individual competencies in research, scientific writing and presentation, and scientific publications.

Furthermore, to convey the relevance of these courses and study materials, there are many ways. One of the recommended ways is to use a matrix according to the guidelines for the preparation of the DIKTI curriculum.

To make it more informative, it is recommended that the learning stages are as follows:

Phase	Depth	Meaning
1	Expo	Competency recognition, not tested
2	Explore	Competencies are taught as complementary, lightly tested
3	Express	Competency is taught as the main material, severely tested
4	Expert	Competency is no longer taught, but is directly used and assessed

For example, written communication skills, were first taught in Indonesian lectures (tahan express). After that, there is a practicum lecture that requires students to write a report, then it can be stated that the lecture contains expert-level written communication study materials.

Table 6.2 Course Matrix Towards Study Materials

No	Code	Courses	Credits	Study Materials							
				TP1	AP1	AP2	AP3	AP4	AP5	MP1	RS1
1	PL5108	Planning Theory	3	3							
2	PL5108	Research Methodology	3							4	3
3	PL6209	Planning Thematic Studio	6	2	3	3	3	3	3	3	3
4	PL5112	Urban Development Planning	3		4	4	4	3	3		
5	PL5113	Urban Development Control	3		3	3	3	3	4		
6	PL6113	Urban Facilities Planning	3		3	3	3	4	3		
7	PL6215	Land and Housing Development	4		3	3	3	3	3	4	
8	PL5122	Contemporary Regional Development	3		3	4	3	4	3		
9	PL5223	Environment and Sustainability	3		4						
10	PL6223	Rural Transformation	3		4	3	3	3	3		

No	Code	Courses	Credits	Study Materials							
				TP1	AP1	AP2	AP3	AP4	AP5	MP1	RS1
11	PL6125	Region Modeling	4		4	4	3	4	3	4	
12	PL5132	Infrastructure and Transportation Systems	3					4			
13	PL5133	Infrastructure and Transportation Planning	3		3	3	3	4	4		
14	PL6133	Infrastructure Management and Transportation	3					4	4		
15	PL6135	Analysis Methods of Infrastructure Planning and Transportation	4		4	4	3	4	3	4	
16	PL5142	Urban Governance	3						4		
17	PL5243	Conflict Management	3						4		
18	PL6243	Urban Land Management	3					4	4		
19	PL6145	Public Policy Analysis	4		3	3	3	3	4	4	
20	PL5152	Disaster Management and Climate Change Adaptation	3		3				4		
21	PL5253	Community-Based Disaster Management and Climate Change Adaptation	3			4			4		
22	PL6153	Disaster Management and Climate Change Adaptation Policy	3		3				4		
23	PL6155	Information and Geo-Spatial Technology for Disaster Management	4		4			4		4	
24	PL5162	Computational Thinking and Data Science	3							4	
25	PL5163	The Concept of Innovation Systems and Smart Cities	3		3	3	3	4	3		
26	PL6163	System and Infrastructure Design 4.0	3					4	4		
27	PL6265	Urban Analytics	4		4			4		4	
28	PL5004	Planning Research Ideas	3								4

No	Code	Courses	Credits	Study Materials							
				TP1	AP1	AP2	AP3	AP4	AP5	MP1	RS1
29	PL5071	Research Paper Writing	3								4
30	PL6071	Planning Research Internship	3								4
31	PL6073	Progress of Planning Research	3							4	4
32	PL5072	Independent Study I	3	3	3	3	3	3	3	3	3
33	P6074	Independent Study II	4	3	3	3	3	3	3	3	3
34	PL5075	Planning Research Management	3								4
35	PL5076	Presentation at Scientific Conference	3								4
36	PL5077	Planning Competitions/Competitions	3	3	3	3	3	3	3	3	
37	PL6075	Publications in International Journals	3								4
38	PL5001	Geo-Information Science and Modeling	3					4		4	
39	PL5002	Utilization of Observation Earth for Planning	3					4		4	
40	PL5003	Leading Topics in Planning	3	3	3	3	3	3	3	3	
41	PL5004	Spatial Economics	3			4				3	
42	PL5073	Professional Project Experience Planning	3	3	3	3	3	3	3	3	3
43	PL5074	Learning Management Planning	3	3	3	3	3	3	3	3	
44	PL5206	Development Institutions	3						4		
45	PL6008	Data Integration for Planning	3							4	
46	PL6009	International Studio on Earth Planning and Design Selatan	4		4	4	4	4	4	4	
47	PL6021	Development of Coastal Areas and Maritim	3		4	4	4	4	3		
48	PL6022	Regional Urbanization	3					4			
49	PL6091	Thesis	7	3	3	3	3	3	3	4	4

No	Code	Courses	Credits	Study Materials							
				TP1	AP1	AP2	AP3	AP4	AP5	MP1	RS1
50	PL6092	Master's Session	2								4
		Total sks	160	35	95	86	76	109	102	81	49
		Max depth		4	4	4	4	4	4	4	4

6.2 Courses and Learning Outcomes

The CPL column is the level of knowledge competence (cognitive). Thus, it can be checked whether a CPL has indeed been taught to meet graduate competency standards.

Table 6.3 Course Matrix on Learning Outcomes

No	Code	Courses	Credits	Learning Outcomes Lulusan			
				1	2	3	4
1	PL5108	Planning Theory	3	5			
2	PL5108	Research Methodology	3				5
3	PL6209	Planning Thematic Studio	6			6	
4	PL5112	Urban Development Planning	3		5		
5	PL5113	Urban Development Control	3		5		
6	PL6113	Urban Facilities Planning	3		5		
7	PL6215	Land and Housing Development	4		5		
8	PL5122	Contemporary Regional Development	3		5		
9	PL5223	Environment and Sustainability	3		5		
10	PL6223	Rural Transformation	3		5		
11	PL6125	Region Modeling	4		5		
12	PL5132	Infrastructure and Transportation Systems	3		5		
13	PL5233	Infrastructure and Transportation Planning	3		5		
14	PL6133	Infrastructure and Transportation Management	3		5		
15	PL6135	Analysis Methods of Infrastructure and Transportation Planning	4		5		
16	PL5142	Urban Governance	3		5		
17	PL5143	Conflict Management	3		5		
18	PL6143	Urban Land Management	3		5		
19	PL6145	Public Policy Analysis	4		5		

No	Code	Courses	Credits	Learning Outcomes Lulusan			
				1	2	3	4
20	PL5152	Disaster Management and Climate Change Adaptation	3		5		
21	PL5153	Community-Based Disaster Management and Climate Change Adaptation	3		5		
22	PL6153	Disaster Management and Climate Change Adaptation Policy	3		5		
23	PL6155	Information and Geo-Spatial Technology for Disaster Management	4		5		
24	PL5162	Computational Thinking and Data Science	3		5		
25	PL5163	The Concept of Innovation Systems and Smart Cities	3		5		
26	PL6163	System and Infrastructure Design 4.0	3		5		
27	PL6265	Urban Analytics	4		5		
28	PL5004	Planning Research Ideas	3				5
29	PL5071	Research Paper Writing	3				6
30	PL6071	Planning Research Internship	3				5
31	PL6073	Progress of Planning Research	3				5
32	PL5072	Independent Study I	3				5
33	PL6074	Independent Study II	4				5
34	PL5075	Planning Research Management	3				5
35	PL5076	Presentation at Scientific Conference	3				6
36	PL5077	Planning Competitions/Competitions	3				6
37	PL6075	Publications in International Journals	3				6
38	PL5001	Geo-Information Science and Modeling	3			5	
39	PL5002	Utilization of Earth Observation for Planning	3			5	
40	PL5003	Leading Topics in Planning	3			5	
41	PL5004	Spatial Economics	3			5	
42	PL5073	Project Experience Planning Professionals	3			5	
43	PL5074	Planning Learning Management	3			5	

No	Code	Courses	Credits	Learning Outcomes Lulusan			
				1	2	3	4
44	PL5206	Development Institutions	3			5	
45	PL6008	Data Integration for Planning	3			5	
46	PL6009	International Studio on Planning and Design in the Global South	3			6	
47	PL6021	Development of Coastal and Maritime Areas	3			5	
48	PL6022	Regional Urbanization	3			5	
49	PL6091	Thesis	7				6
50	PL6092	Master's Session	2				6
		Total sks	160	6	77	37	40
		Max competence		6	6	6	6
		SKL		6	6	6	6

6.3 Course Learning Plan

The Course Learning Plan (RPMK) for each course is given in the appendix.

7 LEARNING PROCESS

7.1 Academic Atmosphere

In order to create a conducive academic atmosphere in supporting the learning process, the ITB Master of Urban and Regional Planning Program facilitates academic interaction among students and lecturers, as well as between fellow students. Some of the strategies applied by the Master Program in Regional and Urban Planning in building an academic atmosphere include:

- Scientific Autonomy:
The PWK Study Program is not tied to certain institutions, both government and private, so the Master of Regional and Urban Planning Program has autonomy in building, interpreting, and inferring knowledge, especially in bridging practice with academic knowledge.
- Academic freedom:
Students and lecturers in the Master Program in Regional and Urban Planning have the freedom to express their opinions academically, not tied to the concept of a particular party. The academic community respects academic freedom by respecting the opinions put forward by fellow colleagues and partners. Differences of opinion can lead to healthy and constructive debate.
- Academic freedom of the pulpit:
The opinions of the academic community can be expressed in written form (papers, journal articles, books, reports, posters, etc.), verbal (presentations at seminars, debates, discussions, competitions, *talk shows* on TV and radio, and others), and visual (videos, films, photos, and others).
- Academic Interactions:
 - a. Lecturers:
It is carried out on weekdays either through face-to-face direct interaction or indirectly through electronic media.
 - b. Lecturer-Students:
 - Guardianship activities are at least once a semester and are possible at any time.
 - Non-guardianship activities are in the form of consultations/discussions in the form of discussions of courses to be taken, how to study, and future plans.
 - c. Students:
Interaction between students occurs in several activities, both inside and outside the classroom. Activities in the classroom include lectures, group discussions, presentations, seminars, workshops, and others. Activities outside the classroom include discussions with students from outside the study program, or from outside ITB.
- Interaction in Expertise Groups (Joint Research)
Students of the Master of Urban and Urban Planning Program are involved in research conducted by supervisors or lecturers in expertise groups based on the specificity of interest. There are 5 (five) groups of expertise in the Regional and Urban Planning Study Program, namely:
 - Regional and Rural Planning Expertise Group;
 - Urban Planning and Design Expertise Group;
 - Regional and Urban Infrastructure Systems Expertise Group;
 - Development Management and Policy Development Expertise Group;
 - Systems and Economic Modeling Expertise Group.
- Interaction and cooperation between Expertise Groups:

The existence of several Expertise Groups in the Regional and Urban Planning Study Program is a means that can be used as a place for academic interaction between the academic community to collaborate and cooperate between expertise groups, both between lecturers and other lecturers, lecturers and students and students.

- Supporting facilities:

ITB provides funds to support the realization of a conducive academic atmosphere. This atmosphere is supported by the provision of computer devices connected to the network, discussion places on each floor, *wi-fi internet services*, lecture materials in the library and on servers, subscriptions to scientific journals both *hardcopy* and electronic, and facilities for students to organize various activities that support the profession (discussions, seminars, training, and others).

- Academic and non-academic programs and activities (inside and outside the classroom) to create an academic atmosphere:

Students of the Master Program in Regional and Urban Planning are always involved in academic and non-academic activities organized by lecturers and study programs, such as in research activities, seminars and symposiums. Academically, students are involved in the preparation of research materials, seminars and symposiums. Student participation in research conducted by lecturers is expected through the Expertise Group (KK). Non-academic involvement, for example, in organizing seminars, so that in addition to having experience in organizing scientific activities, they can also become seminar participants.

- Development of cognitive behavior:

The development of intellectual behavior is carried out simultaneously during the process of students taking the Master of Urban and Urban Planning Study Program, including through lecture assignments (writing papers, presentations, practicums, and others), as well as through student involvement in the Expertise Group (KK). Through the KK, it is hoped that students will be able to develop the knowledge that has been obtained during lectures, because activities in the KK are an application between theory and practice in the field.

7.2 Learning Methods

The following are the learning methods that will be implemented in PM-PWK.

Table 7.1 Implementation of LCE in the Study Program Curriculum

No.	Form of Learning	Learning Methods	Constitutional Court Implementing	Example Assignment
1	Process Learning in the classroom	Group Discussions	All MK theories	<ul style="list-style-type: none"> • Result discussion on groups in the classroom
2		Case-based learning	MKOP with practicum (4 credits)	<ul style="list-style-type: none"> • Group reports
3		Collaborative learning	PL5209 Studio Thematic Planning	<ul style="list-style-type: none"> • Report Facts and analysis • Thematic plan report

No.	Form of Learning	Learning Methods	Constitutional Court Implementing	Example Assignment
4	Structured Assignments	Project-based learning	PL5209 Studio Thematic Planning	<ul style="list-style-type: none"> Report Facts and analysis
5		Problem-based learning	PL5209 Studio Thematic Planning	<ul style="list-style-type: none"> Thematic plan report
6	Independent Activities	Discovery learning dan inquiry	MK placeholder for MBR <ul style="list-style-type: none"> PL5004 Planning Research Ideas (3 credits) PL6071 Planning Research Internship (3 credits) PL6073 Planning Research Progress (3 credits) PL5072 Independent Study I (3 credits) PL6074 Independent Study II (4 credits) 	<ul style="list-style-type: none"> Self-Research Report
7		Self-directed learning	<ul style="list-style-type: none"> PL5072 Independent Study I (3 credits) PL6074 Independent Study II (4 credits) 	<ul style="list-style-type: none"> Self-Research Report

7.3 Learning Modalities

PM-PWK develops learning with various modalities and strategies carried out to facilitate it as follows.

- 1) Synchronous learning, with audio-visual facilities in each classroom allowing for video playback, interactive discussions (including debates, talk shows, and other methods). Some classrooms allow for mixed lectures.
- 2) Asynchronous learning, facilitated by the Directorate of Education Development through Edunex. The study program encourages lecturers to develop interactions and other modes through this platform.
- 3) Study programs encourage students to learn effectively, including being able to search for information, identify important information, record, organize, elaborate, summarize, and monitor understanding, for example—although not always—through resume assignments, quizzes, and other assignments.

7.4 Co-curricular and Extracurricular Activities

At the master's level, co-curricular activities that can be participated by students are involved in projects, research, and community service organized by teaching lecturers in Expertise Groups or Research Centers. Starting in this curriculum, students are allowed to earn credits from participating in these activities with the following MK placeholders:

- 1) PL5075 Planning Research Management
- 2) PL5076 Presentation at Scientific Conference

- 3) PL5077 Planning Competitions/Competitions
- 4) PL6071 Planning Research Internship
- 5) PL6075 Publications in International Journals
- 6) PL5073 Project Experience Planning Professional
- 7) PL5074 Learning Management Planning

8 LEARNING EVALUATION

8.1 Assessment Method

8.1.1 Formative Assessment

Formative assessments are carried out as an evaluation of the achievement of learning objectives. There are several methods of evaluating the achievement of learning objectives, including that at the end of each semester students fill out the Lecturer Evaluation by Students (EDOM) questionnaire, while lecturers fill out lecture portfolios which are self-evaluation records of lecture implementation. The portfolio must be filled in detail and complete and record any improvements made in the implementation of lectures in the year in question compared to the previous year. The lecturer also provided notes of improvements that should be made for the next implementation.

The results of EDOM are material for evaluating lecturer performance and *continuous improvement* in the implementation of lectures every semester. At the SAPPK level, the dean evaluates the performance of lecturers, one of which is by paying attention to EDOM. At the study program level, the Chairman of PM-PWK announces the results of EDOM to students, which consists of course outcomes, lecture implementation, and student experience, in each class using the LMS used at ITB.

8.1.2 Summative Assessment

In addition to formative assessments, the learning process is also summatively analyzed to determine students' academic achievements. The purpose of the exam is to measure student achievement in achieving learning outcomes. Assessment of academic activities in the learning process in the field of Regional and Urban Planning consists of several forms, namely mid-semester exams, end-of-semester exams, individual assignments or quizzes, group assignments, practicums, presentations, and participation in groups. The assessment structure is designed to cover three aspects of learning outcomes, namely knowledge, skills (cognitive), and competence. The form of courses held consists of several forms, namely non-studio and non-practicum courses, courses with practicums, studio courses, and Thesis courses where each form of the course has a different proportion for each assessment component. The details of the proportion of assessments for each form of course held are as follows:

1. Non Studio and Non Practicum Courses:
 - a. Mid-Semester Exam (30 - 35 %)
 - b. Final Semester Exam (40 - 45 %)
 - c. Assignments and Presentations (20 – 30 %)
2. Courses with Practicum:
 - a. Mid-Semester Exam (25 - 30%)
 - b. Final Semester Exam (30 - 35 %)
 - c. Internship (15 - 20%)
 - d. Assignments and Presentations (20 - 25%)
3. Studio Courses:
 - a. Tugas Individual (30 - 35%)
 - b. Group Assignments and Presentations (15 - 20%)
 - c. Participation (20 - 25%)
 - d. Final Semester Exam (25 - 30 %)
4. The Thesis Course is assessed by the supervisor, and 2 examiners.

- a. Manuscript (framework of thinking, data processing and interpretation, analysis techniques, and implications for the field of Regional and Urban Planning)
- b. Session (oral presentation, presentation of manuscripts, mastery of material, and argumentation skills)

8.2 Assessment Method

8.2.1 Letter Values

Lecturers can give scores on various scales, for example 0-100 or 0-4 according to the rubric that is prepared, and then calculate the weighted score that will be used to determine the final student index at the MK.

Table 8.1 Example of Assessment Rubric

	Level				
	Exceptional	Excellent	Good	Satisfactory	Sufficient
Score	>3.76	3.26 – 3.75	2.76- 3.25	2.26 – 2.75	2.00 – 2.25
	90 – 100%	80 – 89%	70 – 79%	60 – 69%	50 – 59%
Index	A	AB	B	BC	<C

Lecturers can determine the score range to provide the final index either with absolute intervals or pay attention to the distribution of class grades. The following are the external achievement levels of courses in the index spectrum:

- A Excellent value
- AB value between good and very good
- B Good value
- BC value between fair and good
- C Fair value
- D almost sufficient score (not passing)
- E Less or Fail (Not Passing)

The special provisions in the assessment are as follows:

1. A D assessment is given if students carry out complete learning according to the Lecture Event Unit (doing assignments, participating in UTS and UAS) and at least 80% attendance at lectures. An E assessment is given if students do not carry out learning completely according to the Lecture Event Unit. For courses with prerequisite status, a D grade will be considered to have taken the course. Meanwhile, an E grade will not be considered to have taken a course.
2. Components and feedback on each component of the score can be provided by the lecturer to students through the LMS platform or return the file. The final index is announced on the *SI-X* platform.
3. Students have the right to know the results and feedback of each component of the assessment, and have the right to ask for clarification from the lecturer if he is not satisfied with the results of the assessment. Lecturers are required to provide information and feedback on the assessment components asked by students.

Regarding the policy of cheating, plagiarism, and academic integrity, students who are proven to have committed academic cheating will be dealt with in accordance with the guidelines set in the Academic Regulations, with 30% plagiarism as the upper limit of tolerance given.

8.2.2 Pass / Not Pass

The following courses are possible with a score of Pass/Not Pass, referring to SNDikti 2023 article 28 paragraph 4:

- 1) PL5075 Planning Research Management
- 2) PL5076 Presentation at Scientific Conference
- 3) PL5077 Planning Competitions/Competitions
- 4) PL5073 Project Experience Planning Professionals
- 5) PL5074 Planning Learning Management

8.2.3 Performance Index

The assessment system can be seen in the ITB Academic Regulations 2021, which:

- Average Score (NR) is the academic achievement of students in one semester which is based on the calculation of the average final grade of the course taken in that semester.
- The Achievement Index (GP) is the academic achievement of students in a certain period based on the calculation of final grades obtained from a certain number of courses, taking into account only the last grade taken if there are courses that are retaken by students.
- The Cumulative Achievement Index (GPA) is the academic achievement of a student in a certain period which is based on the calculation of all final grades that have been achieved by the student, including the grades of the courses that have been retaken.

9 RESOURCE MANAGEMENT

9.1 Human Resources

9.1.1 Lecturer

Lecturers or academic personnel involved in the Master of Urban and Urban Planning Study Program are under the management of the School of Architecture of Regional and Urban Planning (SAPPK), and are members of a group of cognate science fields called Expertise Groups (KK). Of the 9 families in SAPPK, there are currently 5 families that support the learning process in the Master of Urban Planning Study Program, namely the Regional and Urban Infrastructure System Expertise Group (SIWK), the Regional and Village Planning Expertise Group (PWD), the Urban Planning and Development Expertise Group (PPK), the Development Management and Policy Development Expertise Group (P2PK), and Economic Modeling System Expertise Group (SPE).

As explained in the curriculum section, the course structure in the master program in regional and urban planning is grouped into compulsory courses, elective pathway courses that require master's students to choose one of 5 elective paths, and elective courses. Compulsory Courses and Elective Courses are taught by teaching staff who are members of the 4 Skill Groups described above. As for the elective course courses, it is taught by 4 Expertise Groups as follows:

1. Sustainable Regional Development Choice Path (mainly taught by lecturers from the PWD KK).
2. Urban Planning Elective Path (mainly taught by lecturers from the PPK KK).
3. Choice Path for Regional and City Infrastructure Systems (mainly taught by lecturers from the SIWK KK).
4. Disaster Management Planning Elective Path (mainly taught by lecturers from KK PWD and KK P2PK)
5. Smart City System and Innovation Choice Path (taught by a combination of KK PPK, KK SIWK, and KK P2PK lecturers).
6. Urban Governance Choice Path (taught by a combination of KK PPK and P2PK KK lecturers).

Academic staff/lecturers are appointed based on the Rector's Decree. Provisions regarding lecturers who can teach courses independently for Master's study programs as stipulated in the Rector's Decree; At least have earned a doctoral degree and equivalent. Following these provisions, all lecturers (100%) of the Master Program in Regional and Urban Planning already have a doctoral qualification. The composition of lecturer qualifications for the Master of Regional and Urban Planning Study Program can be seen in table D1. The number of permanent lecturers who become lecturers and promoters (supervisors) in the Master of Urban and Urban Planning Study Program is twenty-five (31) lecturers. There are no non-permanent lecturers who are lecturers and promoters (supervisors) in the Master of Urban and Urban Planning Study Program.

9.1.2 Education Personnel

Error! Reference source not found. Table 9.1 to describe the data of all education personnel assigned to the study program.

9.2 Facilities and Infrastructure

The PWK Master's Study Program is located in the Labtek IX A Sugijanto Soegijoko Building. In this building, administrative, teaching and learning activities take place. To ensure security, there are security officers at the SAPPK Building who are on duty at night and on holidays. For lecture rooms at ITB, public facilities are used in the form of Public Lecture Buildings whose arrangements are centralized by the Directorate of Education ITB. This is to make the use of lecture buildings in the ITB environment more effective. Related to this, lecture scheduling must be done from the beginning in an integrated manner with all study programs at ITB. Until now, there are no significant obstacles in the availability of public lecture rooms.

Lecturers and students in the PWK Master Study Program, in addition to using the ITB central library facilities, in the PWK Master Study Program itself has its own library on the 3rd floor of Labtex IX which is specifically for the scientific field of PWK. In many ways, libraries function to support educational and research activities and do not limit visits from the academic community or ordinary people from outside ITB. In accordance with technological developments, SAPPK has developed *a digital library*. The library collection of the PWK Master's Study Program includes textbooks in Indonesian and English, as well as in other languages such as German, French and Japanese, scientific journals published by domestic and foreign institutions, theses, theses and dissertations, magazines and manuals.

Several discussion rooms, seminar rooms or meeting rooms are specifically available in the PWK Study Program building with various capacities or room areas, ranging from 15-100 people. The use of space like this can be more flexible so that sometimes it is also used as a lecture room for substitute lectures if there is a red date on the actual lecture schedule. This space facility is also used to hold guest lectures whose time cannot be scheduled from the beginning of the semester.

The PWK Master's Study Program also has public facilities for students and other academics in the PWK building. These facilities include a canteen, place of worship, kitchen and toilet. Meanwhile, the place of worship is located on the 2nd floor, while the kitchen and toilet are on each floor.

In addition, the academic community of the PWK Master's Study Program can also take advantage of public facilities owned by ITB to support curricular or extracurricular activities. Because the ITB Campus is not too wide, access to ITB's public facilities is very close to the PWK Master's Study Program. ITB's public facilities are in the form of public canteens, sports facilities (Sasana Budaya Ganesa), health facilities (Bumi Medika Ganesa equipped with a pharmacy), banking facilities, bookstores, stationery shops and ITB souvenir shops, Salman Mosque ITB. This facility can also be accessed by the public outside the campus openly with applicable rules.

Computer facilities and support for all lecture, teaching and learning activities are spread across studios, computer-labs/practicums (Labscan), expertise group rooms (KK), classrooms, and administrative administration rooms. The existing computer facilities consist of PCs, Servers, Printers, Network and Hubs, and Wi-Fi (internet access for the entire academic community of the PWK Master's Program with a maximum of 96 connections). While software facilities (outside of MS Office) are mostly software to support teaching materials such as mapping software (ArcView, ArcGIS, MapInfo, Erdas), designing (Autodesk, PhotoShop), Statistics (SPSS, SpaceStat, GeoDa, EDS), and Transportation (TransCad, and Cube), as well as software for servers (Apache) with Unix and Linux OS. The software is stored and managed by Labscan (a practicum lab for mapping and statistics).

In addition, at the institutional level, ITB has a Computer Laboratory (Labcom) managed by USDI (Information Resources Unit). Facilities provided by USDI are available on the website: <http://www.usdi.itb.ac.id/>. Educational tools or media are defined as means of supporting the learning process that are used to maximize the knowledge transfer process.

Teaching equipment facilities available include: chalk whiteboard, whiteboard, video and LCD projector. In accordance with technological developments, at this time the dominant lecture aids have shifted to LCD projectors. The number of LCD projectors is enough for lectures. LCD projectors are readily available in most public lecture halls. For lecture rooms that are not yet available, LCD projectors are presented by education staff from the PWK Master's Study Program along with lecture administration needs such as attendance lists and event minutes. The duplication of teaching materials and exams is facilitated by the provision of copiers, scanners and printers. The photocopier is located in the administrative administration room of the PWK Master's Study Program. For convenience and responding to the appeal for paperless and green environment, currently for teaching materials, lecturers generally make softcopies of lecture materials to be given to students through class leaders appointed by the students themselves.

9.3 Lecturer and Course Matrix

The readiness of lecturers to carry out the curriculum is conveyed in the form of a matrix such as the Table

8.4 to 8.6.

9.4 Matrix of Facilities and Courses

Support for facilities and infrastructure, especially laboratories, to run the curriculum is delivered in the form of a matrix as shown in Table 8.7.

Table 9.1 Study Program Lecturers

No	NIP	Lecturer Name	DT/DTT/DIP	NIDN/NIDK	Areas of Expertise	Academic Departments	Professional Educator Certificate Number	Competency/Professional/Industry Certificate	
								Certification Field	Issuing Institutions
1	197001301998021001	Prof. Ridwan Sutriadi, S.T., M.T., Ph.D.	DT	0030017001	Smart city system	Professor	0003388	Regional and Urban Planning	Ministry of Education and Culture of the Republic of Indonesia
2	195904141992031002	Prof.Ir. Haryo Winarso, M.Eng., Ph.D.	DT	0014045903	Land and housing development	Professor	091104907041	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
3	196206141989031013	Prof.Ir. Djoko Santoso Wise, Ph.D.	DT	0014066208	Environmental planning	Professor	11100200102791	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
4	196003021989031003	Prof.Dr.Ir. Yogi, M.S.	DT	0002036003	Economic Systems and Modeling	Professor	1617/I3/KP/2008	Agribusiness	Ministry of National Education of the Republic of Indonesia
5	197402281997022001	Prof.Dr. Sri Maryati, S.T., MIP	DT	0008066801	Sustainable infrastructure	Professor	11-001050-0324	Regional Planning and Cities	Ministry of National Education of the Republic of Indonesia
6	196403221989031002	Prof.Dr.Eng. Pradono, S.E., M.Ec.Dev	DT	0022036401	Infrastructure economics and transportation	Professor	220/1050/2008	Transportation	Ministry of National Education of the Republic of Indonesia

No	NIP	Lecturer Name	DT/DTT/DIP	NIDN/NIDK	Areas of Expertise	Academic Departments	Professional Educator Certificate Number	Competency/Professional/Industry Certificate	
								Certification Field	Issuing Institutions
7	198208202008121004	Prof.Dr. Delik Come on,	DT	0020088205	Metropolitan planning	Professor	11100200102429	Regional Planning and Cities	Ministry of National Education of the Republic of Indonesia
		S.T., M.T., M.Sc.							
8	196007301986011002	Prof.Dr.Ir. Heru Purboyo Hidayat Putro, DEA	DT	0030076001	Tourism, planning theory	Professor	140/1050/2010	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
9	196806081995121001	Prof.Dr. Miming Miharja, S.T., M.Sc.Eng	DT	0028027401	Infrastructure governance	Professor	11-001050-0228	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
10	111000053	Pringgo Dwiyanoro, S.E., M.M., M.Si.	DT	0428076901	Economic Systems and Modeling	Head Lector	102309057	Management	Ministry of National Education of the Republic of Indonesia
11	198711212015041001	Dr. Fikri Zul Fahmi, S.T., M.Sc.	DT	0021118707	Innovation and Rural Planning	Head Lector	19100200100509	Planning Regions and Cities	Ministry of Research, Technology and Higher Education
12	197904172009121002	Dr. Saut Aritua Hasiholan Sagala, S.T., M.Sc.	DT	0017047905	Disasters	Head Lector	0008131	Regional and Urban Planning	Ministry of Education and Culture of the Republic of Indonesia

No	NIP	Lecturer Name	DT/DTT/DIP	NIDN/NIDK	Areas of Expertise	Academic Departments	Professional Educator Certificate Number	Competency/Professional/Industry Certificate	
								Certification Field	Issuing Institutions
13	196104011989031002	Dr.Ir. Denny Zulkaidi, MUP	DT	0001046102	Development control	Head Lector	141/1050/2010	Regional Planning and Cities	Ministry of National Education of the Republic of Indonesia
14	198211112005021002	Dr. Adiwan Fahlan Aritenang, ST., M.GIT	DT	0011118206	Regional economy and digital	Head Lector	17-002002-0241	Regional Planning and Cities	Ministry of Research, Technology and Higher Education
15	196303171990031002	Dr.Ir. Ivan Kustivan, M.T.	DT	0017036302	Urban environment	Head Lector	11100200116579	Regional Planning and Cities	Ministry of National Education of the Republic of Indonesia
16	196610211993021001	Ir. Tubagus Furqon Sofhani, M.A., Ph.D.	DT	0021106601	Development of rural communities	Head Lector	101104904160	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
17	197403041998021001	Wilmar A. Salim, S.T., M.Reg.Dev., Ph.D.	DT	0004037402	Regional development	Head Lector	11-001050-0375	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
18	196002201984031017	Ibn Sabri, B.Sc., M.Sc., Ph.D.	GERMAN	0020026003	Regional infrastructure	Head Lector	101104904156	Regional Planning and Cities	Ministry of National Education of the Republic of Indonesia

No	NIP	Lecturer Name	DT/DTT/DIP	NIDN/NIDK	Areas of Expertise	Academic Departments	Professional Educator Certificate Number	Competency/Professional/Industry Certificate	
								Certification Field	Issuing Institutions
19	197908012010122003	Dr.Eng. Puspita Dirgahayani, S.T., M.Eng.	DT	0008017905	Transportation management and governance	Head Lector	130010050076	Regional and Urban Planning	Ministry of Education and Culture of the Republic of Indonesia
20	198304172010122002	Dr.Es. Niken Prilandita, S.T., M.Sc.	DT	0017048303	Environment and energy Urban	Lecturer	17-001001-019	Regional Planning and Cities	Ministry of Education and Culture of the Republic of Indonesia
21	198308032015041002	Dr. Bagas Dwipantara Putra, S.T., M.T.	DT	0003088307	Land development	Lecturer	1106/I1. B03/KP/SK/2019	Regional and Urban Planning	Rector of ITB
22	198205272012121005	Nurrohman Wijaya, S.T., M.T., M.Sc., Ph.D.	DT	0427058203	Pengelolaan Development and Policy Development	Lecturer	17100200104745	Planning Regions and Cities	Ministry of National Education of the Republic of Indonesia
23	197312292006041001	Dr. RM. Petrus Natalivan Indradjati, S.T., M.T.	GERMAN	0029127305	Urban amenities	Lecturer	110010500299	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
24	196504021989032002	Ir. Teti Armianti Argo, M.S., Ph.D.	GERMAN	0002046501	Environment and community	Lecturer	176/1050/2009	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
25	196603101994031004	Dr.Drs. Suhirman, S.H., M.T.	GERMAN	0010036601	Planning law	Lecturer	0008136	Regional Planning and Cities	Ministry of Education and Culture of the

No	NIP	Lecturer Name	DT/DTT/DIP	NIDN/NIDK	Areas of Expertise	Academic Departments	Professional Educator Certificate Number	Competency/Professional/Industry Certificate	
								Certification Field	Issuing Institutions
									Republic of Indonesia
26	120110005	Dr. Tengku Munawar Chalil, S.T., MPP.	GERMAN	0021108908	Public policy	Lecturer			
27	197907142012122004	Shanty Yulianti Rachmat, S.T., M.T., Ph.D.	GERMAN	0014077908	Transportation system	Lecturer	15100200105089	Regional and Urban Planning	Ministry of Research, Technology and Higher Education
28	199012212015042002	Dr. I Gusti Ayu Andani, S.T., M.T.	DT	0021129002	Transportation system	Lecturer	1106/I1. B03/KP/SK/2019	Planning Regions and Cities	Rector of ITB
29	196112301991021002	Dr.Ir. Binsar Parasian Hasoloan Naipospos, MSP	GERMAN	0030126102	Transportation institutions	Lecturer	101104904159	Planning Regions and Cities	Ministry of National Education of the Republic of Indonesia
30	122110009	Dr. Eng Maya Safira, S.T., M.T.	DT	0014129302	Urban analytics	Lecturer			
31	197812192010121001	Adenantera Dwicaksono, S.T., M.D., Ph.D.	DT	0019127805	Urban analytics	Expert Assistant	19100200106700	Regional and Urban Planning	Ministry of Research, Technology and Higher Education
32	111000026	Dr.Ir. Hadi Nurcahyo, M.T.	DT	0006016309	Spatial modeling	Expert Assistant	524/I1. B03/KP/SK/2018	Regional Planning and Cities	Rector of ITB

No	NIP	Lecturer Name	DT/ DTT/DIP	NIDN/NIDK	Areas of Expertise	Academic Departments	Professional Educator Certificate Number	Competency/Profession/Industry Certificate	
								Certification Field	Issuing Institutions
33	196806051996031002	Ir. Sugiyantoro, M.I.P., Ph.D.	DT	0005066801	Land development	Expert Assistant	11100200111174	Regional and Urban Planning	Ministry of National Education of the Republic of Indonesia
34	123110015	Isnu Putra Pratama, S.T., M.P.W.K.	DT	0003049405	Metropolitan expansion				

Table 9.2 Education Personnel

Yes	Names of Education Personnel	TT/TT/TAH	NIP	Field of Work	Final Education	Competency/Profession/Industry Certificate	
						Certification Field	Issuing Institutions
1	Edje	Fixed power	197209171994011001	Facilities and Infrastructure Administration	JUNIOR	-	-
2	Nunung Maulani	Fixed power	196803101994032002	Academic Administration	S1 PPKN	1. Health Seminar 2. PUEBI Implementation Training	ITB
3	Wati Sukiwati	Fixed power	196701271994032001	Academic Administration	D4, Prodi MSDMA STIA LAN RI Bandung	1. Marketing Communication Training of ITB Human Resources Development Unit 01 July 2022 01 July 2022; 2. Financial, Literacy and Management of ITB Human Resources Development Unit 23 February 2022 23 February 2022 ;	1. UPT ITB Human Resources Development;
4	Yoninur Almira, S.Sos.	Fixed power	117000086	Librarian	S1 Information and Library Science	1. Technical Guidance on Introduction and Management of Libraries 2. Technical Guidance on the Implementation of Information Literacy Based on Information Technology to Support the Digital Ecosystem of National Higher Education	1. UPT Library of the State University of Jakarta and the Central Management of the Librarians Association Indonesia

5	Anwar Alawi, A.Md., S.M.	Outsourced Power 1	629/PKWT/I/2024	Academic Administratio n	S1 Marketing Management	Service Marketing	National Certification Body Profession
6	Baghir Anjar Prakoso, A.Md.Bns.	Outsourced Power 1	639/PKWT/I/2024	Financial Administratio n	D3 Finance and Banking	BPR Financial Management Services Owned by the Regional Government	NATIONAL AGENCY PROFESSION AL CERTIFICATI ON
7	Siti Maulidah, S.Tr.Ak.	Outsourced Power 1	630/PKWT/I/2024	Financial Administratio n	D4 Management Accounting Government	SAK ETAP-Based Financial Statement Preparation Cluster	NATIONAL CERTIFICATI ON BODY PROFESSION
8	Dr. Eliyaningsih	Impermanen t power	6a/IT1. C08.2/TU/2024	Administratio n	S1 Financial Management	Administrative Management Training and Finance for Degree and Non- Degree Training Programs	Bappenas
9	Muhammad Zakiyyul Fuad, S.Kom.	Outsourced Power 1	631/PKWT/I/2024	IT Personnel	S1 Informatics Engineering	1. Programming and Software Development 2. CCNA 1 3. CCNA 2	1. BNSP 2. Cisco Networking Academy 3. Cisco Networking Academy

¹TT = Fixed energy; TTT = Imconstant energy; TAH = Outsourced Power

² Fields of work can be in the form of administration, finance, librarians, laboratories, technicians, analysts, operators, etc.

Table 9.3 Table of Facilities & Infrastructure

No.	Name of Facility	Area (m ²)	Category *)	Equipment	Sum	Number of Managers	
						Lecturer	Tendik
1	Lab SCAN	137,75	READ	Computer/PC workstation	28	1	1
				Tables and chairs	31		
				Sound system	1		
				Projector	2		
				3D printing	1		
2	Studio Magister DD	56,25	LR	Tables and chairs	20		
				Printer	1		
				Projector	1		
3	Studio Magister 1	30	LR	Tables and chairs	20		
				Printer	1		
				Projector	1		
4	Studio Magister 2	30	LR	Tables and chairs	20		
				Printer	1		
				Projector	1		
5	Library	257,28	FP			1	2
6	Co-working space	90	WAS	Tables and chairs			
				Interactive flat panel	1		
				Smart TV	1		
7	Seminar Room	80	WAS	Tables and chairs			
				Projector	1		
8	Administration	42,42	FK	Work desks and chairs			
				Computer			

*Category : LI / LR / FI / FP / FU / FK

Table 9.4 Lecturer Matrix for Courses for MKWI, MKWP and MKPB Placeholder MBR

No.	Lecturer	Courses											
		PL5208	PL6091	PL6092	PL5108	PL5209	PL5004	PL5071	PL6071	PL6073	PL5072	PL6074	PL6075
1	Iwan Kustiwan, Dr.	P											
2	Prof. Delik Hudalah, Ph.D.	P			P		S	S	S	S	S	S	S
3	Dr.Eng. Puspita Dirgahayani	P											
4	Adenantera Dwicaksono, PhD.	P											
5	Adiwan F. Aritenang, PhD.	P					S						
6	Saut Aritua H. Sagala, Ph.D.	P	P					P					
7	Prof. Heru P.H. Putro, PhD				P								
8	Ir. Tubagus Furqon Sofhani, MA, PhD				P								
9	Dr. Fikri Zul Fahmi, ST,	P	P				S	S	S	S	S	S	S
11	Dr. Niken Prilandita, ST, MSc		P	S									
12	Ninik Suhartini, ST, PhD		P	S		S		P					
13	Ir. Harkunti Pertiwi Rahayu, Ph.D.					P							
14	Prof. Ridwan Sutriadi, Ph.D					P							
15	Alhilal Furqan, MSc, PhD					P							
16	Wilmar Salim, PhD					P							
17	Bagas Dwipantara Son, PhD					P							
18	Dr. Isnu Putra Pratama		S	S	S								
	Total Supporters	7	4	0	3	5	3	1	0	0	0	0	0
	Total Ability to Bear	0	1	3	1	1	0	3	2	2	2	2	2

*) P = already satisfied; S = able to forgive

Table 9.5 Lecturer Matrix for Courses for other MKPB

No.	Lecturer	Courses											
		PL5075	PL5076	PL5077	PL5073	PL5074	PL5001	PL5002	PL5003	PL5004	PL5206	PL6008	PL6009
1	Prof. Delik Hudalah, Ph.D.	S	S			S			S		P		
2	Adiwan F. Aritenang, PhD.	S	S	S	S	S			S	P			
3	Saut Aritua H. Sagala, Ph.D.	S	S						S				
4	Dr. Fikri Zul Fahmi, ST, MSc.	S	S						S	P			
5	Ninik Suhartini, ST, PhD			S	S	S			S				P
6	Ir. Harkunti Pertiwi Rahayu, Ph.D.								P				
7	Wilmar Salim, PhD								S		P		
8	Nurrochman Wijaya, PhD						S	S	S			S	
9	Ibn Syabri, PhD						S	S	S			S	
10	Prof. Sri Maryati								S				P
11	Prof. Pradono								S	P			
12	Prof. Yogi									P			
	Total Supporters	0	0	0	0	0	0	0	1	4	2	0	0
	Total Ability to Bear	4	4	2	2	3	2	2	10	0	0	2	2

*) P = already satisfied; S = able to forgive

Table 9.6 Lecturer Matrix for Courses for MKOP: Urban Planning, Urban Governance, and Innovation Systems and Smart Cities

No.	Lecturer	Courses											
		PL5112	PL5113	PL6113	PL6215	PL5142	PL5243	PL6243	PL6145	PL5162	PL5163	PL6163	PL6265
1	Prof. Ridwan Sutriadi	S				P					P	P	
2	Adiwan F. Aritenang, PhD.											P	
3	Dr. Denny Zulkaidy	P	P					P					
4	Dr. RM Petrus Natalivan			P									
5	Nurrochman Wijaya, PhD					S						P	
6	Ibn Syabri, PhD									P	S		S
7	Prof. Haryo Winarso	S			P						S		
8	Ir. Sugiyantoro, PhD		S	S	P								
9	Bagas Dwipantara Son, PhD				P								
10	Tooth Dwicaksono, PhD					S	S	S	P	S		P	P
11	Dr. Suhirman						P	S					
12	Dr. Tengku Munawar Chalil								P				
13	Dr.Eng. Maya Safira									S			P
14	Prof. Miming Miharja											P	
	Total Supporters	1	1	1	3	1	1	1	2	1	1	5	2
	Total Ability to Bear	2	1	1	0	2	1	2	0	2	2	0	1

*) P = already satisfied; S = able to forgive

Table 9.7 Lecturer Matrix for Courses for MKOP: Sustainable Area Development, Infrastructure and Transportation Systems, Disaster Management Planning

No.	Lecturer	Courses											
		PL5122	PL5223	PL6223	PL6125	PL5132	PL5133	PL6133	PL6135	PL5152	PL5253	PL6153	PL6155
1	Prof. Djoko S.A. Suroso		P							S		S	
2	Adiwan F. Aritenang, PhD.				P								
3	Saut Aritua H. Sagala, Ph.D.												P
4	Dr. Fikri Zul Fahmi, ST, MSc.			P									
5	Ninik Suhartini, ST, PhD					S							
6	Ir. Harkunti Pertiwi Rahayu, Ph.D.									P			
7	Wilmar Salim, PhD	P								S		P	
8	Ir. Tubagus Furqon Sofhani	P									S		
9	Ir. Teti Armiati Argo, PhD		P								P		
10	Dr. Hadi Nurtjahjo				P								
11	Dr. Isnu Putra Prima			S									
12	Prof. Sri Maryati					P							
13	Dr. Ir. Binsar PH Naipospos							P	P				
14	Shanty Y. Rachmat, PhD						P	S					
15	Dr. I Gusti Anna O'Neill						P	S	P				

No.	Lecturer	Courses											
		PL5122	PL5223	PL6223	PL6125	PL5132	PL5133	PL6133	PL6135	PL5152	PL5253	PL6153	PL6155
16	Nurrochman Wijaya, PhD												S
	Total Supporters	2	2	1	2	1	2	1	2	1	1	1	1
	Total Able to Bear	0	0	1	0	1	0	2	0	2	1	1	1

*) P = already satisfied; S = able to forgive

Table 9.8 Matrix of Means for Courses

No.	Sarana/Prasarana	Capacity	Odd Semester				Even Semester			
			Lecture	Credits	Participants	Jam/Mg	Lecture	Credits	Participants	Jam/Mg
1	Lab Scan	30	PL6125	4	30	2	PL6215	4	30	2
			PL6135	4	30	2	PL6265	4	30	2
			PL6145	4	30	2				
			PL6165	4	30	2				
2	Studio Magister DD	35					PL6209	6	35	6
	Studio Magister 1	35					PL6209	6	35	6
	Studio Magister 2	35					PL6209	6	35	6

10 TRANSITION PROVISIONS

10.1 General Rules

The 2024 curriculum will take effect for the Class of 2024 who will start studying in Semester I-2024/2025. For older students who can complete their studies before August 2025, the 2023 Curriculum with 36 credits remains valid.

For older students who cannot complete their studies in August 2025, the provisions apply where the Transitional Curriculum applies. The transitional curriculum is the 2024 curriculum with a load of 36 credits which is specifically packaged through the addition of elective courses with a Pass/File assessment model so that it totals 54 credits.

Students are advised to take the following unstructured MKPB of about 18 credits to complete to 54 credits (pass/fail can be given):

- 1) PL5075 Planning Research Management (3 credits)
- 2) PL5076 Presentation at a Scientific Conference (3 credits)
- 3) PL5077 Competition/Planning Competition (3 credits)
- 4) PL5073 Planning Professional Project Experience (3 credits)
- 5) PL5074 Planning Learning Management (3 credits)
- 6) PL5004 Planning Research Ideas (3 credits)
- 7) PL6071 Planning Research Internship (3 credits)
- 8) PL6073 Progress in Planning Research (3 credits)
- 9) PL5072 Independent Study I (3 credits)
- 10) P6L074 Independent Study II (4 credits)

General rules of PM-PWK curriculum transition:

1. Study programs must map the status for each student who is undergoing studies when the new curriculum is enforced.
2. For students who have not passed certain courses in the old curriculum, the student is required to take a replacement course according to the equivalence table.
3. There is a rule of course equivalence in enforcing the transition from the old curriculum to the new curriculum.

Because the 2023 Curriculum has been set since Semester II-2023/2024, the equivalence of courses in the new curriculum with the 2019 and 2023 Curriculum was conveyed.

Table 10.1 Equivalence of 2019 Curriculum Courses - New Curriculum

CURRICULUM 2019				NEW CURRICULUM				
Code	MK Name	CU		Code	MK Name	CU		
		W	P			Free wi	WP	PB
PL6107	Planning Theory Next	2		PL5108	Planning Theory		3	
PL5207	Research Methodology Next	2		PL5208	Methodology Research	3		
PL6090	Thesis	6		PL6091	Thesis		7	
<i>One of the following studios</i>								
PL6119	Planning Studio Urban Development		4	PL5209	Planning		6	

PL6129	Development Studio Territory		4		Thematic Studio			
CURRICULUM 2019				NEW CURRICULUM				
Code	MK Name	CU		Code	MK Name	CU		
		In	P			WI	WP	PB
PL6139	Infrastructure Systems Studio and Transportation		4					
PL6149	Governance Studio Urban		4					
PL6159	Countermeasures Planning Studio Disaster		4					
PL5205	Planning Studio		4					
PL6009	International Studio on Earth Planning and Design Selatan		4					
PL5111	Planning Urban Development		2	PL5112	Planning Urban Development			3
PL6214	Urban Development Control		2	PL5113	Urban Development Control			3
PL6212	Land and Housing Development		2	PL6215	Land Development and Housing			4
PL6213	Facility Planning Urban		2	PL6113	Planning Urban Amenities			3
PL5221	Regional Development		2	PL5122	Regional Development Kontemporer			3
PL6223	Regional Urbanization		2	PL5223	Milieu and Sustainability			3
PL5102	Resources and Milieu		3	PL5223	Milieu and Sustainability			3
PL6222	Pembangunan Rural		2	PL6223	Transformasi Rural			3
PL6224	Topics Contemporary in Regional Development		2	PL6125	Region Modeling			4
PL5131	Infrastructure Systems and Transportation		2	PL5132	Infrastructure System and Transportation			3
PL6232	Infrastructure Planning and Transportation		2	PL5133	Infrastructure Planning and Transportation			3
PL6234	Infrastructure Management and Transportation		2	PL6133	Infrastructure Management and Transportation			3

PL6233	Analysis Methods of Infrastructure Planning and Transportation		2	PL6135	Method Infrastructure Planning Analysis and Transportation			4
PL5141	Urban Governance		2	PL5142	System Management Urban			3
CURRICULUM 2019				NEW CURRICULUM				
Code	MK Name	CU		Code	MK Name	CU		
		W	P			Free wi	WP	PB
PL6243	Conflict Management		2	PL5243	Conflict Management			3
PL6242	Land Management Urban		2	PL6243	Management Land Urban			3
PL6241	Policy Analysis Public		4	PL6145	Analysis Policy Audience			4
PL 5151	Disaster Management and Climate Change Adaptation		2	PL5152	Disaster Management and Climate Change Adaptation			3
PL6252	Community-Based Disaster Adaptation and Mitigation		2	PL5253	Disaster Management and Climate Change Adaptation Community-Based			3
PL6252	Climate Change Adaptation and Policy		2	PL6153	Disaster Management Policy and Adaptasi Climate Change			3
PL6251	Information and Geo-Spatial Technology in Disaster Management		2	PL6155	Information and Geo-Spatial Technology for Management Disaster			4
PL5161	Computational Thinking and Data Science		2	PL5162	Computational Thinking and Data Science			3
PL6262	The Concept of Innovation Systems and Smart Cities		2	PL5163	Concept About Us Innovation and Smart Cities			3
PL6264	System Design and Infrastructure 4.0		2	PL6163	System Design and Infrastructure 4.0			3
PL6263	Urban Analytics		2	PL6265	Urban Analytics			4
PL6061	Research Proposal		3	PL5004	Idea Research Planning			3
PL6005	Paper Writing Research		2	PL5071	Penulisan Paper Research			3

PL6062	Research Progress		5	PL6073	Progress Research Planning			3
PL6006	Science and Modeling Geo-Information		2	PL5001	Science and Modeling Geo-Information			3
PL6007	Utilization of Earth Observation for Planning		2	PL5002	Utilization of Observation Earth for Planning			3
PL5103	Spatial Economics		3	PL5004	Spatial Economics			3
PL5206	Institutional Pembangunan		2	PL5206	Institutional Pembangunan			3
	SUM							

Table 10.2 Equivalence of 2023 Curriculum Courses - New Curriculum

CURRICULUM 2023				NEW CURRICULUM				
Code	MK Name	CU		Code	MK Name	CU		
		In	P			WI	WP	PB
PL5108	Theory Planning More	3		PL5108	Planning Theory		3	
PL5208	Methodology Research More	3		PL5208	Research Methodology	3		
PL6090	Thesis	6		PL6091	Thesis		7	
PL5209	Studio Thematic Planning	5		PL5209	Studio Thematic Planning		6	
PL5112	Planning Urban Development		3	PL5112	Planning Urban Development			3
PL5113	Control Urban Development		3	PL5113	Control Urban Development			3
PL6215	Development Land and Housing		4	PL6215	Land Development and Housing			4
PL6113	Planning Facilities Urban		3	PL6113	Facility Planning Urban			3
PL5122	Regional Development Kontemporer		3	PL5122	Düsseldorf Contemporary Territory			3
PL5123	Milieu and Sustainability		3	PL5223	Milieu and Sustainability			3
PL6123	Rural Transformation		3	PL6223	Transformasi Rural			3
PL6225	Region Modeling		4	PL6125	Region Modeling			4
PL5132	Infrastructure Systems and Transportation		3	PL5132	About Us Infrastructure and Transportation			3
PL5133	Planning Infrastructure and Transportation		3	PL5133	Planning Infrastructure and Transportation			3
PL6133	Infrastructure Management and Transportation		3	PL6133	Infrastructure Management and Transportation			3
PL6235	Method Infrastructure Planning Analysis and Transportation		4	PL6135	Method Infrastructure Planning Analysis and Transportation			4
PL5142	Urban Governance		3	PL5142	Urban Governance			3
PL5143	Conflict Management		3	PL5243	Conflict Management			3
PL6143	Management Land Urban		3	PL6243	Management Land Urban			3
PL6245	Analysis Policy Public		4	PL6145	Analysis Policy Public			4
PL 5152	Management Disaster s and Change		3	PL5152	Management Disasters and Adaptasi Climate Change			3

	Adaptation Climate							
PL5153	Management Disaster and Change Adaptation		3	PL5253	Management Disaster and Adaptasi			3
CURRICULUM 2023				NEW CURRICULUM				
Code	MK Name	CU		Code	MK Name	CU		
		W	P			Free wi	WP	PB
	Climate Based Community				Change Climate Community-Based			
PL6153	Policy Disaster Management and Adaptation Climate Change		3	PL6153	Disaster Management and Adaptation Policy Climate Change			3
PL6255	Information Technology and Geo-Spatial to Disaster Management		4	PL6155	Technology Information and Geo-Spatial for Disaster Management			4
PL5162	Computational Thinking and Data Science		3	PL5162	Think Komputasi and Data Science			3
PL5163	Innovation System Concept and Smart Cities		3	PL5163	Innovation System Concept and Smart Cities			3
PL6163	Design About Us and Infrastructure 4.0		3	PL6163	Design About Us and Infrastructure 4.0			3
PL6265	Urban Analytics		4	PL6265	Urban Analytics			4
PL5071	Idea Research Planning		3	PL5004	Idea Research Planning			3
PL5004	Penulisan Paper Research		3	PL5071	Penulisan Paper Research			3
PL6201	Internship Research Planning		4	PL6201	Internship Research Planning			3
PL6073	Progress Research Planning		3	PL6073	Progress Research Planning			3
PL5001	Science and Modeling Geo-Information		3	PL5001	Science and Modeling Geo-Information			3
PL5002	Utilization of Earth Observation To Planning		3	PL5002	Utilization Earth Observation for Planning			3
PL5003	Leading Topics in Planning		3	PL5003	Topic Kontemporer in Planning			3

PL6009	International Studio on Earth Planning and Design South		4	PL6009	International Studio on Earth Planning and Design South			4
PL5004	Spatial Economics		3	PL5004	Spatial Economics			3

10.2 Special Rules

The special rules for the transition of the 2024 Curriculum for the Master of Urban and Urban Planning program are:

1. The class of 2023 and before will be enforced the 2023 Curriculum and encouraged to graduate before July 2025.
2. For courses where there is a change in the location of the implementation (from Even to Odd, or vice versa), if necessary, it will be opened in both semesters during the transition period (Odd Semester of the 2024/2025 Academic Year, Even Semester of the 2024/2025 Academic Year).
3. For students who have not passed the mandatory courses in the Old Curriculum, they are required to take the same or equivalent courses in the New Curriculum.

4. The Study Program if necessary provides an Equivalency Form or course equivalence for each student who is undergoing a Curriculum Transition period, or check the status of MK admission by students at SI-X.
5. If there is a change in course credits in the New Curriculum, the number of credits that are taken into account in graduation is the number of credits at the time the course is taken.
6. However, if the same course or one that is equivalent to the weight of credits is different, if it is repeated, it will be listed with a new name and calculated with the weight of the new credits.
7. If the compulsory courses in the Old Curriculum are removed and there is no equality in the New Curriculum, then for students who have passed the course, it is still counted as compulsory course credits in the calculation of graduation credits.
8. For students who have not passed the course, they can take the equivalent new compulsory course.
9. New courses in the New Curriculum can be optional courses for the Class of 2022 and earlier.
10. Lack of credits due to curriculum changes can be compensated by taking elective courses or new compulsory courses in the New Curriculum.
11. These transition rules and special rules apply to PPSM students who have taken the S2 PWK course starting in the 2023/2024 Academic Year.

10.3 Priority for Taking Remaining Courses in the New Curriculum

For Master's Programs, the order of priority is as follows:

1. Thesis Courses;
2. Compulsory courses of study;
3. Elective Courses
4. Independent elective courses

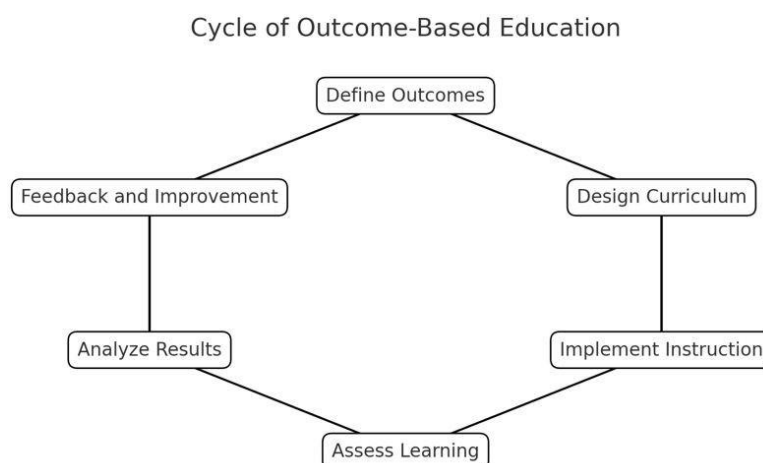
Related to this, the equivalence rules applied are:

1. Equivalence is carried out by adhering to the principle that students should not be harmed.
2. The transition to the new curriculum should not make students have to carry out additional activities beyond the rules of credits and study time stipulated in the provisions of the ITB curriculum.
3. Each student is treated as a special case by paying attention to the stages of study completion.
4. Courses that have been passed will be taken into account in the student's new study plan, with the principle that a course cannot be used in two stages of study or for the equivalence of courses with larger credits.

11 COMPLIANCE WITH ITB POLICIES

11.1 Externally-Based Education

This document fulfills how the curriculum and learning process are structured according to the OBE paradigm, with a focus on the process of designing, achieving, and measuring learning outcomes and a cycle of continuous improvement that is good for learning outcomes/outcomes, both at the course and study program levels.



Gambar 11.1 Siklus OBE

The following are explained the stages, timelines, outputs and actors to carry out a continuous and non-incidental improvement cycle.

Table 11.1 Explanation of OBE Cycles in PM-PWK

Stages	Era	Instruments and/or External	Actor
Pendefinisian outcome	At least once every 5 years	Assessment and amendment of TPPS and CPL	<ul style="list-style-type: none"> Advisory Board User Alumni
Curriculum design	At least once every 5 years	Curriculum revision (major)	Based on input from stakeholders, compiled by the Study Program
	Every semester beginning	Preparation Semester Learning Plan by Paying Attention to the Results of the Evaluation Previous period	<ul style="list-style-type: none"> Lecturer GKM Study Program
Learning assessment	Mid-semester	Mid-Semester Questionnaire	Student
	End of semester	Lecturer Evaluation by Students	Student
Results analysis	End of semester	<ul style="list-style-type: none"> Lecturer Evaluate EDOM results on the Portfolio Listed Contin	Lecturer

Stages	Era	Instruments and/or External	Actor
		uous improvement plan	
Feedback and fixes	At least annually	Implementation of Internal Quality Assurance	GKM
		Follow-up	Study Program, SAPPK, ITB

11.2 Learner-Centered Education

The curriculum has integrated a learner-centered educational design, which consists of the following.

Table 11.2 LCE Explanation

No.	Learning Methods	Constitutional Court Implementing	Assessment Method	Need for Facilities and Infrastructure
1	Group Discussions	All MK theories	Lecturer assessment and peer feedback between group	Classroom
2	Case-based learning	MKOP with a practicum that supports the use of the latest technology in problem solving (4 credits each) <ul style="list-style-type: none"> • PL6215 Land and Housing Development • PL 6125 Region Modeling • PL 6235 Analysis Methods of Infrastructure and Transportation Planning • PL 6145 Public Policy Analysis • PL 6255 Information and Geo-Spatial Technology in Disaster Mitigation • PL 6265 Urban Analytics 	Peer-review dan Project Presentation Evaluation	Computer lab
3	Collaborative learning	PL5209 Thematic Studio Planning 6 credits (MKWP)	Peer-review	Studio space
4	Project-based learning	PL5209 Thematic Studio Planning 6 credits (MKWP)	Peer-review	Studio space
5	Problem-based learning	PL5209 Thematic Studio Planning 6 credits (MKWP)	Peer-review	Studio space

No.	Learning Methods	Constitutional Court Implementing	Assessment Method	Need for Facilities and Infrastructure
6	Discovery learning dan inquiry	MK placeholder for MBR (MKPB) <ul style="list-style-type: none"> • PL5004 Planning Research Ideas (3 credits) • PL6071 Planning Research Internship (3 credits) • PL6073 Planning Research Progress (3 credits) • PL5072 Independent Study I (3 credits) • PL6074 Independent Study II (4 credits) 	Assessment of the presentation of results	Library and Digilib adequately
7	Self-directed learning	MKPB <ul style="list-style-type: none"> • PL5072 Independent Study I (3 credits) • PL6074 Independent Study II (4 credits) 	Assessment of the presentation of results	Library and Digilib adequately

11.3 Curriculum Structure

The curriculum structure has met ITB's policies, including:

Table 11.3 Explanation of ITB Policy Fulfillment in Curriculum Structure

Type MK	Line		ITB Terms
	Research Thesis	MBR	
MKWI	7 CREDITS	7 CREDITS	7 credits, including: <ul style="list-style-type: none"> • Research Methodology (3 credits) • Digital Literacy and Academic Ethics (2 credits) • Master's Session (2 credits)
MKWP	9 CREDITS	9 CREDITS	Minimal 3 sks
MKOP	13 CREDITS	-	Minimum of 12 credits
MKPB	18 credits	22 credits	Minimal 18 sks
MK Research (including Thesis)	7 credits	Thesis 7 sks Research 9 credits	Maximum 12 credits for Research Thesis and 16 credits for MBR

PM-PWK does not open the Case and Project Study pathway because it is not in accordance with the Education Objectives of the Study Program which must be able to carry out and disseminate research and community service in the field of regional and urban planning.

11.4 ITB Mandatory Load

The PM-PWK curriculum meets the requirements for ITB's mandatory content. This fulfillment includes:

Table 11.4 Fulfillment of ITB's Mandatory Load

No.	MKWI	Code and MK	Placement
1	Research Methodology	PL5208 Research Methodology	Sem II
2	Digital Literacy and Academic Ethics	PS5003 Digital Literacy and Academic Ethics	Sem I
3	Thesis	PL6091 Thesis	Sem III or IV
4	Master's Session	PL6092 Master's Session	Sem III or IV

A more detailed explanation of the weight and content of the Constitutional Court is explained in the RPMK.

11.5 Learning Scheme

PM-PWK develops a multidisciplinary learning scheme with the following details.

Table 11.5 Fulfillment of Learning Scheme

Form of Multidisciplinary Scheme	Amount and Weight of MK		Friend	Implementation Linimation
	As a Host	As a Contributor		
Creativity based/ Design Leadership	9 MK (34 credits)	4 MK (13 credits)	FSRD	It has been running since 2023
Smart X	9 MK (34 credits)	4 MK (13 credits)	STEI	Will run 2024
Disasters	9 MK (34 credits)	4 MK (12 credits)	FITB	Will start in 2024/2025

11.6 International Accreditation and Comparative Review

PM-PWK refers to ASIN's international accreditation for Urban and Regional Planning (TC03) sub-criteria which is equivalent to the European Qualification Framework level 7. This criterion does not specifically regulate entry requirements, stakeholders, study materials, curriculum structure, assessment methods and student graduation requirements. It's just that a few need to be met:

- The educational objectives and learning outcomes of graduates are in accordance with EQF level 7, equivalent to the Bloom taxonomy P5-6 as directed in this curriculum guidelines.
- The study load per year is 60 ects. This has been fulfilled where 54 credits is equivalent to 90 ects.

ATTACHMENT COURSE LEARNING PLAN

In this appendix, the Course Learning Plan (RPMK) for all courses is submitted. The RPMK format is given separately.

RPMK is a concise design of courses that includes course identity, short syllabus, related CPMK and CPL, course links with other courses, and concise assessment guidelines. Study programs can refer to section 5.1.2. from the ITB 2024 Curriculum Guidance Document for detailed content from RPMK.

Note: The RPMK will be detailed into a Semester Learning Plan (RPS) by the lecturer in charge of the course. RPS needs to be prepared every time you will teach, and will be part of the curriculum implementation document

COURSE LEARNING PLAN				
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING				
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND				
POLICY DEVELOPMENT				
BANDUNG INSTITUTE OF TECHNOLOGY				
MK Code: PL5208		Bobot sks: 3 sks	Semester: 2	Type: MKWI
Course Name		Research Methodology		
		Research Methodology		
Related Courses				
Study Materials		Literature review and reference management		Expert
		Statement of the problem and purpose of the research		Express
		Research conceptualization		Express
		Research approach		Express
		Quantitative and qualitative research design		Express
		Data collection and analysis		Express
		The process of preparing scientific reports and publications		Express
Graduate Learning Outcomes (CPL) carried out by the course				
CPL code		Powerline Elements		
CPL.4		Able to conduct research in the field of planning and development specialization Regions and Cities		
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)		
CPL.4	CPMK.1	Students evaluate the essence, substance, process, techniques and issues in research and writing, presentation, and publishing research results.		
	CPMK.2	Able to determine research topics, formulate research problems and research questions.		
	CPMK.3	Able to create draft research proposals in the field of regional and urban planning.		
Learning Methods		Lectures and discussions, case studies, panels and coaching		
Learning Modalities		Offline/mixed, synchronous, standalone and grouped		
Assessment Method		Thesis proposal, quiz/UAS		

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6091	Bobot sks: 6 sks	Semester: 4	Type: MKWI
Course Name	Thesis		
	Thesis		
Related Courses	PL5208	Research Methodology	Pre-requisite
Study Materials	Development of research topics		Express
	Literature Review		Express
	Study Design		Express
	Data collection		Express
	Data processing		Express
	Analysis		Express
	Sintesis		Express
	Scriptwriting		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Applying science in the field of transportation through research and projects.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Able to create research sequentially, logically and follow the correct rules of academic writing.	
	CPMK.2	Able to demonstrate a critical attitude towards the theories, concepts, methods and/or techniques studied that have the potential to be published as articles at least in accredited national journals or equivalent.	
Learning Methods		Case Studies, Problem-Based Learning, or other equivalent methods.	
Learning Modalities		Luring, mandiri.	
Assessment Method		The thesis manuscript is tested through a discussion session and an exam session by one supervisor and two other lecturers as examiners. Value includes aspects substance of the manuscript and presentation.	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6092	Bobot sks: 2 sks	Holidays: 3/4	Type: MKWI
Course Name	Master's Session		
	Thesis Defence		
Related Courses	PL5208	Research Methodology	Pre-requisite
Study Materials	Trial preparation		Expert
	Presentations and Q&A		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Able to conduct research in the field of planning and development specialization Regions and Cities	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Able to present and defend the results of his thesis research at the Exam Session	
Learning Methods		Assessment by the examiner, independent presentation preparation	
Learning Modalities		Self-sustaining, asynchronous presentation preparation	
Assessment Method		The thesis manuscript is tested through a discussion session and an exam session by one supervisor and two other lecturers as examiners. Value includes aspects substance of the manuscript and presentation.	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5108	Bobot sks: 3 sks	Semester: One	Type: MKWP
Course Name	Planning Theory		
	Planning Theory		
Related Courses			
Study Materials	Philosophy and interaction between planning and dynamics Global Civilization		Express
	The Evolution of Global Planning Traditions: pre-modern, modern, post- modern		Express
	Planning Dynamics in Indonesia		Express
	Ethics of the planning profession		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.1 CPL.1.5		Mastering the theory and ethics of planning and sustainable development of regions and cities	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.1	CPMK.1	Students can discuss the meaning and development of planning theory, its philosophy and implications for planning practice, its limitations, and explain planning practice in Indonesia in the spotlight of planning theory.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		Take home test atau UTS (40%), critical review and in-class discussions (30%), final paper or UAS (30%)	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6209	Bobot sks: 5 sks	Semester: 2	Type: MKWP
Course Name	Planning Thematic Studio		
	Planning Thematic Studio		
Related Courses			
Study Materials	Introduction to themes and study areas		Express
	Thematic specific knowledge and skills		Expert
	Conceptualization and operationalization of studies		Express
	Data collection		Express
	Data processing		Express
	Facts and analysis		Express
	Preparation of the plan		Express
	Ethics of the planning profession		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve planning and development problems regions and cities collaboratively by taking into account spatial, economic, socio-cultural, environmental, technological and institutional factors.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Able to evaluate and create thematic plans by revealing the specific characteristics of the study area and formulating or revising the plan creatively.	
	CPMK.2	Able to present and discuss the results of understanding the thematic study of planning and the resulting plan formulation.	
	CPMK.3	Able to create development strategies by evaluating coordinated facility planning and initiating staging plans.	
Learning Methods		Short courses related to specific knowledge and skills if required, case study, field survey, guest lecture by related stakeholders.	
Learning Modalities		Offline, synchronous, group	
Assessment Method		Activeness and understanding of the process and substance (30%), final exams (30%), Peer-review (30%), activity logbook (10%)	

COURSE LEARNING PLAN STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND POLICY DEVELOPMENT BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5112	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Urban Development Planning		
	<i>Urban Development Planning</i>		
Related Courses			
Study Materials	Urban Development Planning and Its Problems		Expert
	Theory and Concept of Urban Development Planning		Expert
	Contemporary Issues in Urban Development Planning		Expert
	Urban Development Management		Express
	Urban Development Planning System in Indonesia		Express
	The Challenges of Future City Development		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development	
CPL.2.1		Able to formulate strategies to direct urban development	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1 CPMK.2 CPMK.3	Students can: a. understand and explain urban development planning as a theory, concept and practice; b. Analyze urban problems and problems; and c. Creating the concept of urban development planning and management to solve urban problems.	
Learning Methods		Lectures and discussions, Problem-Based Learning	
Learning Modalities		Luring, sinkron,	
Assessment Method		<ul style="list-style-type: none"> Task 1: Literature review of urban planning/development concepts (paper, 30%) Task 2: Application of urban development concepts in Indonesia (paper, 30%) Final Semester Exam (40%) 	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5113	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Urban Development Control		
	Urban Development Control		
Related Courses			
Study Materials	Theory and concept of urban development control.		Express
	Urban development control device		Express
	Development control procedures and institutions city		Expert
	Cases of urban development control		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.1		<ul style="list-style-type: none">Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and developmentAble to formulate strategies to direct urban development	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1 CPMK.2 CPMK.3 CPMK.	<ul style="list-style-type: none">Able to explain the basic theory and concept of urban development control,Able to identify the type of control device,Able to analyze the characteristics and effectiveness of the implementation of urban development control devices, as well asAble to create effective control solutions for specific situations.	
Learning Methods		Lectures and discussions, empirical studies/case studies, problem-based learning	
Learning Modalities		Offline/mixed, synchronous, self-contained groups	
Assessment Method		2x Weekly Presentations (Weight: 20%); Individual Tasks (Weight: 30%); Assignment Group (Weight: 30%); Final Semester Exam (Weight: 20%)	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6113	Bobot sks: 3 sks	Semester: 3	Type: MKOP
Course Name	Urban Facilities Planning		
	Urban Facilities Planning		
Related Courses			
Study Materials	Theory and Concept of Urban Facility Provision		Express
	Government Obligations in Provision and Planning Urban Amenities		Express
	Problems in the Provision of Urban Facilities		Express
	Urban Facilities Provision Devices and Innovations		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2		Mastering concepts, theories, theories and methods in processes and substances in the field of specialization in regional and urban planning and development.	
CPL.2.1		Able to formulate strategies to direct urban development	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Being able to create innovative solutions based on existing theories and concepts is the key to success in dealing with complex planning cases.	
Learning Methods		Lectures and discussions, case studies, brainstorming	
Learning Modalities		Offline, asynchronous and synchronous, standalone and group	
Assessment Method		Quizzes and group presentations and discussions for theory lectures (week 2 to 8) as UTS (30%), UAS (30%), Large Task (40%)	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6215	Bobot sks: 4 sks	Semester: 2	Type: MKOP
Course Name	Land and Housing Development		
	Land and Housing Development		
Related Courses			
Study Materials	Definition and Problems in Land and Housing development		Express
	Urban Land Market and Development Process		Express
	Land Policy		Express
	Urban Land appraisal		Express
	Land for housing the poor		Express
	Current and emerging housing issues: local and global contexts		Expert
	Housing policy		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to formulate strategies to direct urban development	
CPL.2.1			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Able to evaluate various aspects of urban land development and the provision of affordable housing, including price assessments and potential government intervention	
Learning Methods		Case studies, collaborative learning	
Learning Modalities		Offline, synchronous, self-paced and group	
Assessment Method		Assignments (30%), UAS (40%), assignments and group presentations (30%)	

COURSE LEARNING PLAN STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND POLICY DEVELOPMENT BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5122	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Contemporary Regional Development		
	Contemporary Regional Development		
Related Courses			
Study Materials	Criticism of the Classical Approach in Development Region		Express
	Economics		Express
	Development of the Concept of Regional Development		Express
	Competitive Regions: The Concept of Endogenous Region Development		Express
	Policies towards Competitive Regions		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development Able to formulate innovative strategies for evidence-based sustainable regional development	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1 CPMK.2	Students can explain the limitations of the concept of classical regional development based on natural resources, the power of investment from outside and the growth of the backward region through the trickle-down effect mechanism Students can explain the development of contemporary regions through a competitive region approach based on the concept of developing neo-endogenous regions through strengthening the capacity of local leadership and institutions, entrepreneurship, innovation and innovation diffusion, and networking between actors.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		Take home test atau UTS (40%), critical review and in-class discussions (20%), final paper or UAS (40%)	

COURSE LEARNING PLAN STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND POLICY DEVELOPMENT BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5123	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Environment and Sustainability		
	Environment and Sustainability		
Related Courses			
Study Materials	Value System in Environmentalism		Expert
	Approaches to Understanding Environmental Problems		Express
	Scalability – Spatial prospects: Climate Change, Biodiversity		Express
	Environment and Planning (spatial planning)		Express
	Human interaction in nature – social Equity & Environmental justice		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development Able to formulate innovative strategies for evidence-based sustainable regional development	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Explain the scope, historical orientation, philosophy, driving factors of environmental and ecological perspectives or changes to regional and urban planning	
	CPMK.2	Analyze process procedure and result change milieu that affecting planning, especially developing countries, coastal areas and disaster-prone areas;	
	CPMK.3	Analyze and synthesize planning issues that require interpretation from an environmental and ecological perspective, and;	
	CPMK.4	Critique of the social and environmental implications of new planning, policy approaches to current environmental change	
	CPMK.5	Intervene, reflect, or promote prospective solutions in planning against environmental changes affecting society and spatial configuration	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone and grouped	
Assessment Method		Knowledge (40%), Ability (30%), Behavior (30%)	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6125	Bobot sks: 4 sks	Semester: 2	Type: MKOP
Course Name	Region Modeling		
	Regional Modelling		
Related Courses			
Study Materials	Geospatial and Environmental Modeling		Express
	Economic and Spatial Modeling		Express
	Social Network Modeling		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.2		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to formulate innovative strategies for the development of evidence-based sustainable areas.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Students are able to create various modeling applications that are effective in regional planning, as well as can interpret existing data.	
Learning Methods		Case studies, collaborative learning, practicums, tutorials	
Learning Modalities		Offline, synchronous, self-paced and group	
Assessment Method		UTS (30%), UAS (40%), group assignments and presentations (30%)	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6223	Bobot sks: 3 sks	Semester: Even	Type: MKOP
Course Name	Rural Transformation		
	Rural Transformation		
Related Courses			
Study Materials	Perspective and debate fundamental deep pembangunan Rural		Expert
	Characteristics and transformation of the countryside		Express
	Transformative approaches in rural development		Express
	Critical reflection on Indonesia's rural case		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development	
CPL.2.2		Able to formulate innovative strategies for evidence-based sustainable regional development	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Able to critically evaluate problems, approaches and practices within the framework of transformative rural development	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline, asynchronous and synchronous, standalone and group	
Assessment Method		Take home test atau UTS (30%), critical review and in-class discussions (40%), final paper or UAS (30%)	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5132	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Infrastructure and Transportation Systems		
	Infrastructure and Transportation System		
Related Courses			
Study Materials	Spatial Aspects in Infrastructure and Transportation Systems		Expert
	Contemporary Issues in Infrastructure and Transportation Systems		Express
	Various kind infrastructure: water clean water waste, waste, rainwater, energy and telecommunications, sources waterpower, land, rail, sea and air transport		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development Can explaining, analyzing the needs of and plan Infrastructure and transportation systems	
CPL.2.5			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Students are able to understand the basic concepts of regional and urban infrastructure systems, along with the characteristics of each type of infrastructure.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		Take home test atau UTS (30%), critical review and in-class discussions (40%), final paper or UAS (30%)	

COURSE LEARNING PLAN STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND POLICY DEVELOPMENT BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5133	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Infrastructure and Transportation Planning		
	Infrastructure and Transportation Planning		
Related Courses			
Study Materials	Infrastructure and Transportation Planning Position		Express
	Problem Formulation and Objectives		Express
	Issues in Infrastructure and Transportation Planning		Express
	Alternative Forecasting and Formulation		Expert
	Management and Planning Process		Express
	Evaluation and implementation		Express
	Institutions and funding		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development Can explaining, analyzing the needs of and plan Infrastructure and transportation systems	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Students are able to structure the latest issues and challenges in the field of Infrastructure and Transportation, as well as mastery of the principles, processes, theories, and types of analysis used in infrastructure and transportation planning.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		Take home test or UTS (25%), Assignments (50%), final paper or UAS (25%)	

COURSE LEARNING PLAN			
STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING			
FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6133	Bobot sks: 3 sks	Semester: 3	Type: MKOP
Course Name	Infrastructure and Transportation Management		
	Infrastructure and Transportation Management		
Related Courses			
Study Materials	Infrastructure and Transportation Management Issues		Expert
	Basic Management Theory		Express
	Domains and Constraints of Infrastructure & Transportation Management		Express
	Management Special Topics : Infrastructure Financing & Transportation		Express
	Transport Impact Development (Land Value Capture & Land Property Tax)		Express
	Public Utilities in Urban Management		Express
	PPP (Public Private Partnership)		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.3		Mastering concepts, theories, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Can explain Analyze necessity and Plan Infrastructure and transportation systems	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Students are able to evaluate regional and urban infrastructure management approaches, by understanding theory and practice and explaining various types and related issues.	
	CPMK.2	Students are able to formulate and compile a map of infrastructure management problems within the framework of regional and city plans.	
Learning Methods		Lectures and discussions, case studies, brainstorming, seminars	
Learning Modalities		Offline/mixed, synchronous, standalone and grouped	
Assessment Method		Seminar assignments: 30%, UTS: 35%, UAS: 35%	

COURSE LEARNING PLAN			
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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6235	Bobot sks: 4 sks	Semester: 2	Type: MKOP
Course Name	Analysis Methods of Infrastructure and Transportation Planning		
	Transportation and Infrastructure Analytical Methods		
Related Courses			
Study Materials	Data projection and management methods		Express
	Infrastructure planning analysis methods		Express
	Transportation planning analysis method:		Express
	Analysis methods in prioritizing		Express
	Analysis methods in project evaluation		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development.	
CPL.2.3		Can explain Analyze necessity and Plan Infrastructure and transportation systems	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Able to evaluate and create appropriate infrastructure and transportation analysis methods, by understanding the necessary data and formulating analytical models to draw effective conclusions in planning.	
Learning Methods		Collaborative learning; Group Assignments: Preparation of Assignments in the Form of Works Write case-based and then presented	
Learning Modalities		Offline, synced, standalone	
Assessment Method		Midterm exams (35%), final exams (40%), assignments (25%)	

COURSE LEARNING PLAN STUDY PROGRAM: MASTER OF URBAN AND REGIONAL PLANNING FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND POLICY DEVELOPMENT BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5142	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Urban Governance		
	Urban Governance		
Related Courses			
Study Materials	Concept of Urban Governance		Express
	Land management and urban forms		Express
	Urban infrastructure management and services		Express
	Management of urban and suburban areas		Express
	Dynamic urban governance in the 21st century		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to understand the arena, analyze problems and formulate development governance strategies, especially in the scope of regions and cities in realizing sustainable development.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Students are able to explain the definition and scope of urban governance. Students are able to explain aspects of inputs, processes, outputs, and outcomes of urban governance. Explain the influence of internal and external factors in the formation of urban governance Explain urban governance practices in various sectors	
	CPMK.2		
	CPMK.3		
	CPMK.4		
Learning Methods		Reading materials, lectures and discussions, empirical studies/case studies, class debates, brainstorming, talkshow/panel, roundtable, kuliah tamu	
Learning Modalities		Offline, synced, standalone	
Assessment Method		Take home test or UTS (30%), Task (20%), final paper or UAS (40%), Class Participation (10%)	

COURSE LEARNING PLAN			
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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5143	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Conflict Management		
	Conflict Management		
Related Courses			
Study Materials	Conflicts and Conflict Situations in Development		Express
	Conflict Management Theory		Express
	Conflict Management Practices		Express
	Conflict and Conflict Management in Urban Management in Indonesia		Expert
	Conflict Resolution Models and Techniques		Expert
	Seminar on Conflict Management Cases in Indonesia		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.4		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to understand the arena, analyze problems and formulate development governance strategies, especially in the scope of regions and cities in realizing sustainable development.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	1. Students are able to understand the importance of understanding the various latent conflicts that may arise as a result of forecasting actions in regional and urban development planning. 2. Students are able to use conflict management principles in an effort to optimize urban development management comprehensively.	
Learning Methods		Critical Review, lectures and class discussions, empirical studies/case studies and debates Classes, Talk Shows/Panels, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, asynchronous, standalone	
Assessment Method		Attendance (5%) • Critical Review Tasks: Presentation (10%), Discussion (10%), Report final (5%) • Group assignments (10%) • UTS (25%) • UAS (35%)	

COURSE LEARNING PLAN			
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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6143	Bobot sks: 3 sks	Semester: 3	Type: MKOP
Course Name	Urban Land Management		
	Urban Land Management		
Related Courses			
Study Materials	Urban Land Problems and Problems		Expert
	Basic Concepts of Land Management		Express
	Land Management Operational Tools		Express
	Land Management Institutions		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.4		Mastering concepts, theories, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to understand the arena, analyze problems and formulate development governance strategies, especially in the scope of regions and cities in realizing sustainable development.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1 CPMK.2 CPMK.3	Able to explain the concepts, basic principles and characteristics of land management tools in theory, regulations and practices; Able to identify problems and structure land problems; Students are able to analyze land problems, formulate alternative management options, and recommend the most appropriate handling alternatives to overcome land problems and/or achieve the set goals.	
Learning Methods		Weekly reading assignments and presentations, case studies, problem-based learning	
Learning Modalities		offline, synchronous, independent and group,	
Assessment Method		Task 1: 2x weekly class presentation (20% weight), Task 2: deepening of land management tools (individual, 20%), Task 3: case solving land management problems (group, 35%), Final semester exams (25%)	

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MK Code: PL6145	Bobot sks: 4 sks	Semester: 2	Type: MKOP
Course Name	Public Policy Analysis		
	Public Policy Analysis		
Related Courses			
Study Materials	Reason/Justification of public policy analysis		Express
	Policy development analysis processes and tools		Express
	Policy analysis in political and social contexts		Express
	Policy Context and Policy Needs		Express
	Ex-Ante analysis		Express
	Ex-post analysis		Express
	Qualitative Analysis Approach in Public Policy		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.4		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to understand the arena, analyze problems and formulate development governance strategies, especially within the scope of regions and cities in realizing sustainable development.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Able to evaluate development problems and policy objectives in assessing possible strategies.	
	CPMK.2	Creating and adapting appropriate policy options	
	CPMK.3	Evaluating the impact of alternative policy options	
Learning Methods		Lectures, self-reading, practicums, self-directed individual assignments, group work	
Learning Modalities		Offline, synchronous and asynchronous, standalone and group	
Assessment Method		Group assignments and weekly individual assignments (40%), papers and presentations Policy analysis (60%)	

COURSE LEARNING PLAN			
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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5152	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Disaster Management and Climate Change Adaptation		
	Disaster Management and Adaptation to Climate Change		
Related Courses			
Study Materials	Basic Concepts of Disaster Management, Disaster Mitigation and Climate Change Adaptation		Express
	Hazard, Vulnerability and Capacity Analysis (HVCA)		Express
	Disaster Risk Reduction based Spatial Planning		Express
	Assessing & Improving Preparedness		Express
	Early Warning System		Express
	Recovery Planning – Legal Aspect, Budgeting and Lesson Learned		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development Able to formulate integrated disaster risk reduction solutions and/or strategies in inclusive, resilient and sustainable development planning	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	1. Students understand the concept and implementation of disaster risk assessment and analysis in the field of regional and urban planning. 2. Students understand the concept and implementation of disaster risk reduction and climate change adaptation strategies in the field of regional and urban planning.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Case Studies and Workshops	
Assessment Method		Final Mark = 10% for Individual Works 1, 10% Individual Work 2, 40% Group Works for Case Study Project, and 40% Final Examination.	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5153	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Community-Based Disaster Adaptation and Mitigation		
	Community-based Adaptation and Disaster Mitigation		
Related Courses			
Study Materials	Stratification social and Influence deep Lift Mitigative and adaptive disasters		Expert
	Risk in Communities and Orientasi pada Pre Disaster and Community Resilience		Expert
	The Power of Community; Local Wisdom, citizen science		Expert
	Methods of engaging the communities		Expert
	Networking, Valuation dan Evaluation		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development Able to formulate integrated disaster risk reduction solutions and/or strategies in inclusive, resilient and sustainable development planning	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Understand community-based disaster management through an understanding of model differences, mitigation and adaptation integration, and methodological analysis to support effective planning.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Audio-visual (videos and images to spark discussion)	
Assessment Method		Class Participation (20%), Quiz 1 (5%), UTS (25%), Quiz 2 (5%), Presentation and joint assignment papers (25%), UAS (20%)	

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MK Code: PL6153	Bobot sks: 3 sks	Semester: 3	Type: MKOP
Course Name	Disaster Mitigation and Climate Change Adaptation Policy		
	Disaster Mitigation and Climate Change Adaptation Policy		
Related Courses			
Study Materials	Nature of Disasters and Policies		Express
	Policy and Institutional Framework		Express
	Question and solution framework		Express
	Perspectives on climate change and planning		Express
	Practice of spatial planning for climate change response		Express
	Participation, communication and learning		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to formulate solutions and/or disaster risk reduction strategies that are integrated in inclusive, resilient and sustainable development planning. Sustainable	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Students are expected to be able to evaluate the impact of climate change and formulate effective disaster risk reduction policies at the national and international levels.	
Learning Methods		Case studies, project-based learning	
Learning Modalities		Offline, asynchronous and synchronous, standalone and group	
Assessment Method		UTS, group assignment 1, group assignment 2, UAS	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6255	Bobot sks: 4 sks	Semester: 2	Type: MKOP
Course Name	Information and Geo-Spatial Technology in Disaster Mitigation		
	Information and Geo-spatial Technology in Disaster Mitigation		
Related Courses			
Study Materials	Information and geo-spatial technology in disaster management		Expert
	Information technology and geo-spatial in related studies Disaster Management		Expert
	Information technology and geo-spatial in management practices disaster		Expert
	Information Technology and geo-spatial policy in practice Disaster Management		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to formulate integrated disaster risk reduction solutions and/or strategies in inclusive, resilient and sustainable development planning	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Able to understand and create information and geo-spatial technologies in the study and practice of disaster management.	
Learning Methods		Case studies, group discussions	
Learning Modalities		Offline, synchronous, self-paced and group	
Assessment Method		Assignments, presentation papers, exams	

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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5162	Bobot sks: 3 sks	Semester: One	Type: MKOP
Course Name	Computational Thinking and Data Science		
	Computational Thinking and Data Science		
Related Courses			
Study Materials	Introduction to Programming Languages and Data Types		Expert
	Algorithm basics		Express
	Searching and Sorting, Web Crawling		Express
	Inferential statistics		Express
	Mathematical foundations		Express
	Machine Learning dan AI		Express
	Cluster analysis		Express
	Nonparametric Test		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.5		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development Able to explain the management of the role of urban informatics and model data from various sources to develop efficient urban systems	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Students are able to master the theory and practice of regional and urban planning and its application in planning preparation.The competencies gained include urban informatics management, data modeling for urban efficiency, and formulating and evaluating policies and plans using spatial modeling theories, methods, and tools and/or dynamic.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		Take home test atau UTS (30%), critical review and in-class discussions (40%), final paper or UAS (30%)	

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MK Code: PL5163	Bobot sks: 3 sks	Semester: 1	Type: MKOP
Course Name	The Concept of Innovation Systems and Smart Cities		
	Concept of Innovation System and Smart Cities		
Related Courses			
Study Materials	Gerakan New Urbanism		Express
	Smart Cities and Development Planning Systems		Express
	Innovation and Smart Cities		Express
	Communicative City		Express
	Intelligent Urbanism		Express
	Smart Cities and Social Media		Express
	Technopolis and the SDGs		Express
	Smart City Ethics		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code	Powerline Elements		
CPL.2 CPL.2.6	Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to explain the management of the role of urban informatics and model data from various sources to develop an efficient urban system.		
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Able to evaluate the understanding of the definitions and characteristics of innovation systems and smart cities. Explain the concepts and theories underlying smart city planning, and create the use of technology in the context of urban planning.	
Learning Methods		Lectures and discussions, case studies, presentations	
Learning Modalities		Offline, asynchronous and synchronous, standalone and group	
Assessment Method		Take home test atau UTS (30%), critical review and in-class discussions (40%), final paper or UAS (30%)	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6163	Bobot sks: 3 sks	Semester: 3	Type: MKOP
Course Name	System and Infrastructure Design 4.0		
	System Design and Infrastructure 4.0		
Related Courses			
Study Materials	Smart Cities: System Design		Expert
	Smart Infrastructure		Expert
	Logic and Physic System Infrastructure 4.0 Design		Expert
	Planning Intelligence		Expert
	Cyber Security		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2 CPL.2.6		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to explain the management of the role of urban informatics and model data from various sources to develop an efficient urban system.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Students are able to create innovative solutions by evaluating the design system and concept of digital infrastructure development, as well as using information technology-based technical skills to support development financing.	
Learning Methods		Group discussions, problem-based learning	
Learning Modalities		Offline, asynchronous and synchronous, standalone	
Assessment Method		Take home test atau UTS (30%), critical review and in-class discussions (40%), final paper or UAS (30%)	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6265	Bobot sks: 4 sks	Semester: 2	Type: MKOP
Course Name	Urban Analytics		
	Urban Analitics		
Related Courses	PL5162	Computational Thinking and Data Science	Pre-requisite
Study Materials	Urban Analytics Methodology		Expert
	Understanding Business in the context of Urban Analytics		Expert
	Data Understanding		Expert
	Data setup in Urban Analytics		Expert
	Model Development		Expert
	Model Deployment		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.2		Mastering concepts, theories and methods in processes and substances in the field of specialization in regional and urban planning and development. Able to explain the management of the role of urban informatics and model data from various sources to develop an efficient urban system.	
CPL.2.6			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.2	CPMK.1	Able to conduct a study of urban analytics objectives in accordance with the regional and urban problems that are being faced. Able to identify data needs and prepare data for urban analytics needs. Able to create AI-based urban analytics models that suit the needs of urban analytics. Able to explain the strategy and stages of AI model deployment in answering various urban problems.	
	CPMK.2		
	CPMK.3		
	CPMK.4		
Learning Methods		Lectures, self-reading, practicum (Hands-on), independent individual assignments, work group	
Learning Modalities		Offline, asynchronous and synchronous, standalone and group	
Assessment Method		Weekly individual assignments (60%), group project assignments (40%)	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5071	Bobot sks: 3 sks	Semester: One	Type: MKPB
Course Name	Planning Research Ideas		
	Planning Research Ideas		
Related Courses			
Study Materials	Literature Review		Expert
	Pre-proposal preparation		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Able to conduct research in the field of regional and urban planning and development specialization	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Students can prepare complete research proposals and annotated bibliography appendices in the field of regional and urban planning.	
Learning Methods		Seminars, independent study, guidance with lecturers	
Learning Modalities		Asynchronous, self-contained	
Assessment Method		Literature review reports/papers (100%)	

COURSE LEARNING PLAN			
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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6071	Bobot sks: 3 sks	Semester: 2	Type: MKPB
Course Name	Planning Research Internship		
	Planning Reseachr Internship		
Related Courses			
Study Materials	Project planning		Expert
	Project execution		Expert
	Project evaluation		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Able to conduct research in the field of planning and development specialization Regions and Cities	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Able to evaluate the relevance of the theoretical perspective used and carry out research tasks with other researchers.	
	CPMK.2	Use and apply one or more methodology-related tasks.	
	CPMK.3	Critically reflect on the research design and its results. Reflect on being a professional researcher.	
	CPMK.4		
Learning Methods		Case study	
Learning Modalities		Mixed, independent	
Assessment Method		Logbook (50%), Reflection essay (50%)	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6073	Bobot sks: 3 sks	Semester: 3	Type: MKPB
Course Name	Progress of Planning Research		
	Progress in Planning Research		
Related Courses			
Study Materials	Research implementation		Expert
	Consultation and presentation of research progress		Expert
	Research progress reporting		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Able to conduct research in the field of planning and development specialization Regions and Cities	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Students are able to create research designs, survey tools, as well as survey and research reports comprehensively.	
Learning Methods		Case study	
Learning Modalities		Mixed, independent	
Assessment Method		Logbook (80%), Reflection paper (20%)	

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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5001	Bobot sks: 3 sks	Semester: One	Type: MKPB
Course Name	Geo-Information Science and Modeling		
	Geo-Information Science and Modelling		
Related Courses			
Study Materials	Spatial data modelling		Expert
	Data management		Expert
	Coordinate systems and map projections		Expert
	Data entry and retrieval		Expert
	Spatial analysis		Expert
	Data quality, visualization and modelling		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3 CPL.3.5		Able to apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and institutional factors	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Explain what GI Science is, apply the knowledge that will be taught to them during the course and perform data analysis through the GI system, to some extent.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		PraktikumTopic test (written exam) : 70% Poster product (individual assignment) : 30%	

COURSE LEARNING PLAN			
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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5002	Bobot sks: 3 sks	Semester: One	Type: MKPB
Course Name	Utilization of Earth Observation for Planning		
	Earth Observation for Planning		
Related Courses			
Study Materials	Radiasi from the electromagn		Expert
	Visual interpretation of image data		Expert
	Radiometric operations and visualization		Expert
	Image data classification		Expert
	Operasi Geometri		Expert
	Satellite position		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and institutional factors	
CPL.3.5			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Able to apply EM radiation knowledge for land cover info extraction & digital image classification. Radiometric image correction & visual interpretation. Analysis of sensors & radiometric processes in multi temporal studies. Pixel image classification & geometric transformation. Sensor data selection for spatial problem solving. Recognition of cultural differences in spatial info.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		UTS, UAS, Quizzes, Individual Assignments, Practicum	

COURSE LEARNING PLAN			
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FACULTY/SCHOOL: SCHOOL OF ARCHITECTURE, PLANNING AND			
POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5003	Bobot sks: 3 sks	Semester: One	Type: MKPB
Course Name	Contemporary Topics in Planning		
	Contemporeary Topics in Planning		
Related Courses			
Study Materials	Theoretical Basis		Express
	Scientific Development		Express
	Pressed		Express
	Implications for Substance and Planning Procedures Regions and cities in Indonesia		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and institutional factors	
CPL.3.5			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Able to explain and apply up-to-date understanding of important trends and topics in the field of regional and urban planning to improve skills.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Audio-visual (videos and images to spark discussion)	
Assessment Method		The assessment is carried out according to the needs of each teaching lecturer. It is recommended that at least it consists of UTS and UAS.	

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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5004	Bobot sks: 3 sks	Semester:	Type: MKPB
Course Name	Spatial Economics		
	Spatial Economics		
Related Courses			
Study Materials	Location theory		Express
	Spatial Structure of Urban Economy		Express
	Urban Economy		Express
	Regional Economy		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and institutional factors	
CPL.3.5			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Able to explain the basic concepts of regional and urban economic systems, including theories of location, urban structure, as well as important policy issues such as housing, transportation, and the environment.	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, talkshows/panels, roundtables, guest lectures, practicums, tutorials	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		UTS (30%), WHO (40%), tugas (30%)	

COURSE LEARNING PLAN			
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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5005	Bobot sks: 3 sks	Semester: One	Type: MKPB
Course Name	Research Paper Writing		
	Research Paper Writing		
Related Courses			
Study Materials	Rules for writing scientific papers		Expert
	Ilimah paper writing strategy		Expert
	Structure of Scientific Paper Writing		Expert
	Procedure for writing a scientific paper		Expert
	Academic ethics of writing scientific papers		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4 CPL.4.6		Able to conduct research in the field of regional and urban planning and development specialization	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Explain the writing, presentation, and publication of scientific papers and be able to produce drafts in accordance with ethics and writing rules in the field of regional and urban planning.	
Learning Methods		Regular lectures, practicums, assistantships, seminars, workshops	
Learning Modalities		Offline, synced, standalone	
Assessment Method		Draft paper and submission to journals/seminars	

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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5072	Bobot sks: 3 sks	Semester: Even	Type: MKOP
Course Name	Independent Study I		
	Independent Study I		
Related Courses			
Study Materials	Self-study planning		Express
	Implementation of independent study and consultation		Express
	Evaluation		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Able to conduct research in the field of regional and urban planning and development specialization	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Able to explain and evaluate concepts and/or theories on a contemporary topic of regional and urban planning	
Learning Methods		Independent study under the guidance of a lecturer	
Learning Modalities		Asynchronous, self-contained	
Assessment Method		Study reports, presentations	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5073	Bobot sks: 3 sks	Semester:	Type: MKPB
Course Name	Project Experience Planning Professionals		
	Professional Project Experience in Urban and Regional Planning		
Related Courses			
Study Materials	Project planning and task descriptions		Expert
	Task execution and coordination		Expert
	Inter/progress reporting		Expert
	Final reporting		Expert
	Reflections on PWK's profession		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and institutional factors	
CPL.3.5			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Able to apply expertise in a field of specialization in regional and urban planning in a professional project in a government or non-governmental institution	
Learning Methods		Self-employment under the guidance of a more senior planner	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		Internship/project activity reports and activity results	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5074	Bobot sks: 3 sks	Semester: One	Type: MKPB
Course Name	Planning Learning Management		
	Classroom Management in Planning Schools		
Related Courses			
Study Materials	Learning preparation and planning		Expert
	Design of learning methods		Expert
	Classroom/tutorial/response/assistance		Expert
	Monitoring and evaluation		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and communicate critically theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and Institutional	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Able to apply expertise in the area of specialization of regional and urban planning in teaching activities	
Learning Methods		Lectures and discussions, empirical studies/case studies, class debates, brainstorming, Talk Shows/Panels, Roundtables, Guest Lectures	
Learning Modalities		Offline/mixed, synchronous, standalone	
Assessment Method		Activity reports and assistance logbooks	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5075	Bobot sks: 3 sks	Semester: One	Type: MKPB
Course Name	Planning Research Management		
	Managing Research in Urban and Regional Planning		
Related Courses			
Study Materials	Job planning and job descriptions		Expert
	Task execution		Expert
	Self-development/personal capacity of researchers		Expert
	Monitoring the progress of the task		Expert
	Reporting and evaluation		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Able to conduct research in the field of regional and urban planning and development specialization	
CPL.4.5			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Able to evaluate the personal and academic skills needed to plan and carry out research tasks in the area of regional and urban planning specialization	
	CPMK.2	Able to manage a research project under the leadership/guidance of the main lecturer/researcher in the field of regional and urban planning	
Learning Methods		Practicum/practical work under the supervisor in the expertise group or Research Center	
Learning Modalities		Asynchronous, self-contained	
Assessment Method		Activity reports and logbooks	

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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5076	Bobot sks: 3 sks	Semester: Even	Type: MKPB
Course Name	Presentation at Scientific Conference		
	Presenting at an Academic Conference		
Related Courses			
Study Materials	Abstract preparation		Expert
	Preparation of papers and presentations		Expert
	Presentation implementation		Expert
	Presentation reporting		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.24		Able to conduct research in the field of planning and development specialization Regions and Cities	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Able to present and communicate research results in the field of regional and urban planning at scientific conferences	
Learning Methods		Guidance with lecturers, independent preparation, presentation implementation	
Learning Modalities		Audio-visual (videos and images to spark discussion)	
Assessment Method		Draft papers and submissions to conferences	

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POLICY DEVELOPMENT					
BANDUNG INSTITUTE OF TECHNOLOGY					
MK Code: PL5077		Bobot sks: 3 sks	Semester: One	Type: MKPB	
Course Name		Planning Competitions/Competitions			
		Competitions/Contests in Urban and Regional Planning			
Related Courses					
Study Materials		Competition preparation			Expert
		Implementation/preparation of competition materials			Expert
		Competition implementation			Expert
		Competition results reporting			Expert
Graduate Learning Outcomes (CPL) carried out by the course					
CPL code		Powerline Elements			
CPL.4		Able to conduct research in the field of regional and urban planning and development specialization			
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)			
CPL.4	CPMK.1	Able to communicate expertise in the field of regional and urban planning specialization in a competition, competition or competition			
Learning Methods		Empirical studies/case studies, brainstorming, self-study			
Learning Modalities		Asynchronous, self-contained or group			
Assessment Method		Proof of achievement in the competition or competition along with the work presented			

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL5206	Bobot sks: 3 sks	Semester: 3	Type: MKPB
Course Name	Development Institutions		
	Development Institutions		
Related Courses			
Study Materials	Good governance		Express
	Governance institutions		Express
	Public Sector Financing		Express
	Institutions of the business world and their financing		Express
	Community institutions and their financing		Express
	Coordination and cooperation		Express
	Its development and financing strategy		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and communicate critically theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to spatial, economic, socio-cultural, environmental, infrastructure, technological and Institutional.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Able to explain the integration of institutional aspects and development financing conceptually and empirically in regulating and managing cities and regions that is rapidly growing in a complex society and comprehensive economic globalization	
Learning Methods		Lectures and discussions, case studies, panels	
Learning Modalities		Offline, asynchronous and synchronous, standalone	
Assessment Method		UTS, UAS and individual/group papers	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6008		Bobot sks: 3 sks	
		Semester: 3	
		Type: MKPB	
Course Name		Data Integration for Planning	
		Data Integration for Planning	
Related Courses			
Study Materials		System Earth	
		System components and models	
		Use and the User, Spatial Data Infrastructure and Geo-portals	
		Data Integration	
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve planning and development problems regions and cities collaboratively by taking into account spatial, economic, socio-cultural, environmental, technological and institutional factors.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Able to evaluate the earth system by integrating systems analysis and systems thinking to build a model that describes reality as a system with its components and inter-relationships.	
	CPMK.2	Able to create user-centered designs by defining "usability" and applying design principles at the initial requirements analysis stage, as well as selecting prototype evaluation methods in the final stage.	
	CPMK.3	Able to explain and implement basic processes, processing, analysis, and conversion in a Spatial Data Infrastructure (SDI) environment, integrate data from various remote sensing, and use change detection methods to address data integration challenges.	
Learning Methods		Practicum, group discussions	
Learning Modalities		Offline, synchronous, self-paced and group	
Assessment Method		UTS, UAS, group discussions, group assignments	

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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6009	Bobot sks: 4 sks	Semester: 3	Type: MKPB
Course Name	International Studio on Planning and Design in the Global South		
	International Studio on Planning and Design in the Global South		
Related Courses			
Study Materials	Understanding the context of Planning in the Global South		Expert
	Studio Job Survey		Expert
	Studio Job Analysis		Expert
	Planning Proposals and Design Proposals		Expert
	Final Presentation and Exhibition		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve regional and urban planning and development problems collaboratively by paying attention to factors spatial, economic, socio-cultural, environmental, technological and institutional.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Studio participants are expected to create effective planning and design recommendations by evaluating the planning context, analyzing data and thematic issues, and gaining knowledge and skills related to study theme.	
Learning Methods		Group discussions, collaborative learning, case studies	
Learning Modalities		Offline/mixed, synchronous, standalone and group	
Assessment Method		Tugas 1 individual essay (perseorangan) (70%), tugas 2 planning and designing Case Studies (Group) (30%)	

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POLICY DEVELOPMENT			
BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6021	Bobot sks: 3 sks	Semester: 3	Type: MKPB
Course Name	Development of Coastal and Maritime Areas		
	Coastal and Marine Development		
Related Courses			
Study Materials	Characteristics of Coastal Areas		Expert
	Potential Resources of Coastal and Marine Areas		Expert
	Potential Hazards of Coastal and Marine Areas		Expert
	Social Aspects of Coastal and Sea Areas		Expert
	Coastal Area Development Governance		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve planning and development problems regions and cities collaboratively by paying attention to spatial, economic, socio-cultural, environmental, technological and institutional factors.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Students can understand, analyze, interpret, synthesize and evaluate various matters related to the development of coastal and marine areas.	
Learning Methods		Group discussions, problem-based learning	
Learning Modalities		Offline, synchronous, self-paced and group	
Assessment Method		Quizzes (5%), papers (50%), group assignments and presentations (40%), class activity (5%)	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6022	Bobot sks: 3 sks	Semester: 3	Type: MKPB
Course Name	Regional Urbanization		
	Regional Urbanization		
Related Courses			
Study Materials	Definition of urbanization and population mobility		Express
	Urban growth and development		Express
	World systems and urbanization		Express
	Metropolitan development		Express
	Interaction and migration of village-cities		Express
	Implications of urbanization and migration policies		Express
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.3		Able to apply and critically communicate theories, systems, processes, and methods to solve planning and development problems regions and cities collaboratively by paying attention to spatial, economic, socio-cultural, environmental, technological and institutional factors.	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.3	CPMK.1	Students are able to evaluate various conceptions, causal factors and impacts of urbanization on a regional scale.	
	CPMK.2	Students are able to formulate appropriate policy implications to respond to contemporary issues of regional urbanization.	
Learning Methods		Lectures, problem-based learning, and seminars	
Learning Modalities		Offline, asynchronous and synchronous, standalone	
Assessment Method		Critical review (40%), Group Assignment (40%), Quizze/activity (20%)	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6074	Bobot sks: 4 sks	Semester:	Type: MKPB
Course Name	Independent Study II		
	Independent Study II		
Related Courses			
Study Materials	Preparation and design of independent study		Expert
	Literature Review and/or specific training		Expert
	State-of-art on substantive or procedural planning theory		Expert
	Preparation of study reports		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Able to conduct research in the field of planning and development specialization Regions and Cities	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Able to critically evaluate concepts and/or theories on a contemporary topic of regional and urban planning	
	CPMK.2	Able to create conceptual arguments about knowledge gaps from the results of the evaluation of concepts and theories reviewed	
Learning Methods		Independent study under the guidance of a lecturer	
Learning Modalities		Asynchronous, self-contained	
Assessment Method		Study reports, presentations	

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BANDUNG INSTITUTE OF TECHNOLOGY			
MK Code: PL6075	Bobot sks: 3 sks	Semester:	Type: MKPB
Course Name	Publications in International Journals		
	Publishing in an International Journal		
Related Courses			
Study Materials	Preparation and writing of the manuscript		Expert
	Arrangement of fittings		Expert
	Manuscript submission/submission		Expert
Graduate Learning Outcomes (CPL) carried out by the course			
CPL code		Powerline Elements	
CPL.4		Able to conduct research in the field of planning and development specialization Regions and Cities	
CPL code	CPMK	Elements of Course Learning Outcomes (CPMK)	
CPL.4	CPMK.1	Able to create research article manuscripts in the field of regional and urban planning that are submitted to international scientific journals	
Learning Methods		Independent work under the guidance of lecturers	
Learning Modalities		Mixed, independent	
Assessment Method		Proof of submission of manuscripts in international journals	