



**SPECIFICATION DOCUMENT**  
**DOCTORAL PROGRAM IN PHARMACEUTICAL SCIENCES**

**FACULTY OF PHARMACY**  
**UNIVERSITAS GADJAH MADA**  
**2023**

**SPECIFICATION OF DOCTORAL PROGRAM IN PHARMACEUTICAL SCIENCE  
FACULTY OF PHARMACY UNIVERSITY OF GADJAH MADA**

Data for the last year:

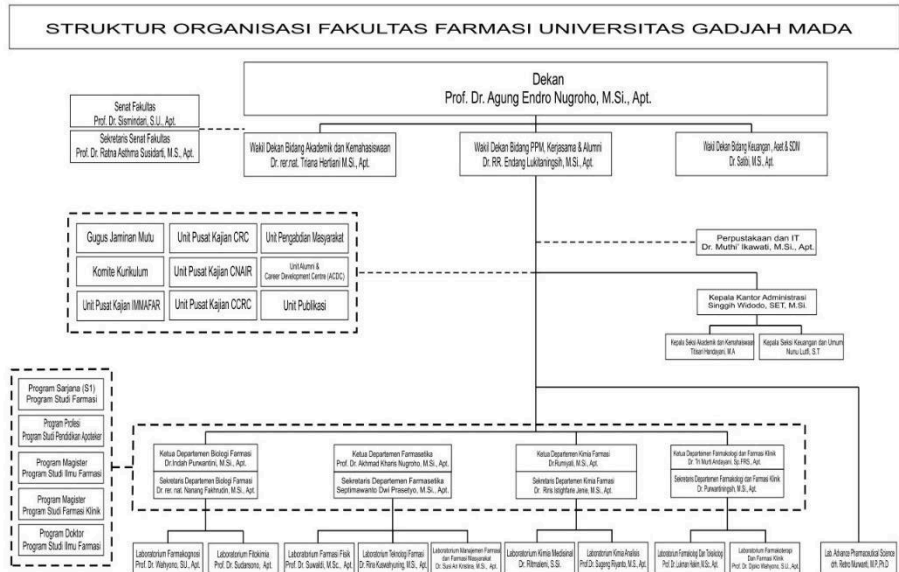
1.	Faculty	:	Pharmacy
2.	Study Program	:	Doctoral Program in Pharmaceutical Science
3.	Level	:	Doctor
4.	Head of Study Program	:	Prof. Dr. apt. Zullies Ikawati
5.	Area of Specialization	:	-
6.	Final Degree	:	Doctor of Pharmaceutical Science
7.	Address	:	Jl. Sekip Utara Yogyakarta, 55281
	Telephone/Fax	:	0274 - 543120
	Email	:	doktor.farmasi@ugm.ac.id
	Website	:	<a href="http://programdokter.farmasi.ugm.ac.id">http:// programdokter.farmasi.ugm.ac.id</a>
8.	Establishment Decree	:	SK Dirjen DIKTI No. 580/Dikti/Kep/1993
	Date of Establishment Decree	:	29 September 1993
	Official Signing the Establishment Decree	:	Direktur Jenderal Pendidikan Tinggi
	Signing Official Month and Year of Commencement of Study Program Implementation	:	29 September 1993
	Operational Permit Decree Number (*)	:	931/PI/SK/HT/2014.
	Date of Operational Permit Decree Number	:	20 November 2014.
9.	Vision	:	To become a pioneer of excellent and innovative Doctor of Pharmacy education, at the national and international levels, following the advancement of science and technology, promoting ethical and moral values, imbued with Pancasila to serve the interests of the nation and humanity

10.	Mission	:	<ol style="list-style-type: none"> <li>1. Organizing a research- based doctoral programme in pharmaceutical sciences, prioritizing ethical and moral values, and having an international outlook.</li> <li>2. Carry out the development of multi-, inter- and trans-disciplinary research to produce applicable research works in the field of pharmacy and health with external cooperation.</li> <li>3. Carrying out community service based on research results to solve national and humanitarian problems</li> </ol>
11.	Educational goals	:	<ol style="list-style-type: none"> <li>1. Producing graduates of Higher Pharmacy Education who embody Pancasila values, are innovative, nationally excellent, and internationally recognized.</li> <li>2. Producing research and community service works to address national and humanitarian issues</li> </ol>
12.	Target	:	<ol style="list-style-type: none"> <li>1. Obtaining high-quality students.</li> <li>2. Improving the quality of the education process.</li> <li>3. Enhancing the quality of research.</li> <li>4. Enhancing the quality of community service.</li> <li>5. Improving the quality of graduates.</li> <li>6. Enhancing the effectiveness and efficiency of management.</li> </ol>
13.	History	:	<p>The Faculty of Pharmacy at Gadjah Mada University was established by the Ministry of Health of the Republic of Indonesia on September 27, 1946, under the name Perguruan Tinggi Ahli Obat (PTAO) (this date is designated as the founding day of the Faculty of Pharmacy, UGM). This institution joined a consortium of colleges consisting of the Faculty of Medicine, the Faculty of Dentistry, the Faculty of Agriculture, and the Faculty of Veterinary Medicine, all headed by Prof. Dr. M. Sardjito, located in the Tegalyoso Hospital Complex, Klaten. Gadjah Mada State University (UNGM) was opened by the Ministry of PP&amp;K on December 19, 1949 (now designated as the anniversary of Gadjah Mada University, Yogyakarta).</p> <p>Meanwhile, the Faculty of Medicine, the Faculty of Dentistry, and the Faculty of Pharmacy remained under the Ministry of Health. Through Presidential Decree No. 37 of 1950 dated August 14, 1950, signed by Mr. Assat as the Acting President of the Republic of Indonesia, Ki Mangun Sarkoro as the Minister of PP&amp;K, and KRT. E. Pringgodigdo as the Minister of Justice, the Indonesian government affirmed that UNGM was under the jurisdiction of the Ministry of PP&amp;K. The term "Perguruan Tinggi" (College) was changed to "Fakultit" (Faculty), namely the Faculty of Medicine, Dentistry, and Pharmacy.</p> <p>In 1954, the government decided to standardize the terms "Fakultit" and "Universitit" to "Fakulta" and "Universitas" respectively. The private Gadjah Mada College Foundation no longer existed, so the word "Negeri" (State) in UNGM was removed, becoming UGM. The promotion level (level 1) lectures at the Faculty of Medicine, Dentistry,</p>

and Pharmacy (FKKGF) were still combined, with the same lecturers, but with different examination questions. In subsequent developments, these three fields were separated into faculties. It started with the Faculty of Pharmacy on December 19, 1955, based on Decree of the Minister of PP&K No. 53759/-Kab, followed by the Faculty of Dentistry on December 29, 1960, based on Decree of the Minister of PP&K No. 1090741/UU. When separated from FKKGF, the Faculty of Pharmacy did not yet have permanent teaching staff, so its administration was handled by non-permanent staff. The first Dean was Prof. Drs. R. Sardjono (from the Faculty of Medicine) and the Secretary was Prof. Ir. Gembong Soetoto Tjitrosoepomo (from the Faculty of Agriculture).

The Faculty of Pharmacy had permanent lecturers starting from 1963. In 1973, the Faculty of Pharmacy began to occupy a place in Sekip Utara, where it remains to this day. However, due to the difficulty in finding pharmacist teaching staff, the doctoral level (the final level of the undergraduate program) and the pharmacist level were still held in Semarang because at that time Semarang had available pharmacist teaching staff. It was only in 1977 that the entire teaching-learning process at the Faculty of Pharmacy could be conducted in Yogyakarta in one campus in Sekip Utara, Yogyakarta.

14. Organizational Structure



15. Quality Assurance System

LAMPT-KES

16. Accreditation by BAN-PT

2015 (Grade A)

	BAN-PT Decree No.	: 844/SK/BAN-PT/Akred/D/VIII/2015.
	Accreditation by LAMPT-KES	: 2020 (Grade A)
	LAMPT-KES Decree No.	: 0407/LAM-PTkes/Akr/Dok/XI/2020 20 November 2020
17.	List of lecturers according to EPSBED (minimum 6 lecturers)	: Prof. Dr. apt. Zullies Ikawati. Dra. apt. Tri Murti Andayani, Sp.FRS., Ph.D. Dr. apt. Fita Rahmawati, Sp.FRS. Dr. apt. Nanang Munif Yasin, M.Pharm. Dr. apt. Arief Nurrochmad, M.Si., M.Sc. Prof. Dr. apt. Edy Meiyanto, M.Si. Prof. Dr. apt. Ratna Asmah Susidarti, M.S. Prof. Dr.rer.nat. apt. Triana Hertiani, M.Si. Prof. Dr. apt. Erna Prawita Setyowati, M.Si. Dr. apt. Purwantiningsih, M.Si. Dr. apt. Puji Astuti, M.Sc. Prof. Dr. apt. Satibi, M.Si. Dr. apt. Chairun Wiedyaningsih, M.Kes., M.App.Sc. Dr. apt. Susi Ari Kristina, M.Kes. Dr. apt. Dwi Endarti, M.Sc. apt. Anna Wahyuni Widayanti, M.P.H., Ph.D Prof. Dr. apt. Abdul Rohman, M.Si. Prof. Dr. apt. Agung Endro Nugroho, M.Si. Dr.rer.nat. apt. R.R. Endang Lukitaningsih, M.Si. Dr.rer.nat. Ronny Martien, M.Si. Dr. apt. Ika Puspita Sari, M.Si. Dr. apt. Abdul Karim Zulkarnain, M.Si. Dr. apt. Teuku Nanda Saifullah Sulaiman, M.Si. Dr. apt. Rumiya, M.Si. Dr. Djoko Santosa, M.Si. Dr. apt. Indah Purwantini, M.Si. Ritmaleni, S.Si., Ph.D. Dr.rer.nat. apt. Tatang Irianti, M.Sc. Dr. apt. Hilda Ismail, M.Si. Dr.rer.nat. apt. Yosi Bayu Murti, M.Si. Dr. apt. Andayana Puspitasari Gani, M.Si. Dr. apt. Riris Istighfari Jenie, M.Si. Dr. B.S. Ari Sudarmanto, M.Si. drh. Retno Murwanti, M.P., Ph.D. Dr. Sylvia Utami Tunjung Pratiwi, M.Si. Dr.rer.nat apt. Adam Hermawan, M.Sc. Dr.rer.nat. apt. Nanang Fakhruddin, M.Si. Dr. apt. Hari Purnomo, M.S. Dr. apt. Nunung Yuniarti, M.Si. apt. Adhyatmika, M.Biotech. Ph.D. apt. Muhammad Novrizal Abdi Sahid, M.Eng., Ph.D. Dr. apt. Muthi' Ikawati, M.Sc. apt. Eka Noviana., M.Sc, Ph.D.

		apt. Rohmad Yudi Utomo, M.Si, Ph.D
18.	Non-permanent lecturer: additional assignments	: -
19.	Number of Students	160
	Indonesian Students	: 159
	Foreign student	: 1
20.	Description of Competency of Study Program Graduates	: 1. Teacher: The graduates become a teacher who masters the concept of academic integrity, philosophy of pharmaceutical sciences, theory, and general concepts of advanced science in pharmaceutical technology and community clinical pharmacy, performs teaching professionally, and can master and develop new theories.
		2. Researcher: The graduates become a pharmaceutical researcher who is independent, masters research principles in the development and application of pharmaceutical sciences in pharmaceutical technology and community clinical pharmacy, and can manage, lead, and develop innovative pharmaceutical research to improve the quality of life in society, nation and state, through inter, multi and transdisciplinary approach.
		3. Leader: The graduates become a leader who can internalize the spirit of independence, and can evaluate, make decisions, and demonstrate independent performance to produce solutions with integrity to solve pharmaceutical science and health problems in society.
21.	Curriculum: Reguler Track	: The curriculum for the regular track of the Pharmaceutical Sciences doctoral program consists of 42 credits (for the 2016 cohort and earlier), comprising 10 credits of coursework and 32 credits of research to produce a dissertation. For the 2017 cohort and later, it consists of 46 credits, divided into 12 credits of coursework and 32 credits of research for the dissertation. For the 2017 cohort, the coursework load undertaken by students is 12 credits, consisting of: 4 credits for general courses (mandatory for all program participants), 4 credits for core courses (taken by students whose dissertation topics or research areas align with the course content), and 4 credits for dissertation support courses. Dissertation support courses are those whose content can relate to or support the dissertation research. For example: If a student chooses a dissertation topic in the field of Pharmaceutics, they would take a 4-credit course in scientific writing and publication, 2-credit courses in Pharmaceutics and Pharmaceutical Technology I and II each, and 2-credit courses in Pharmacology II and Biology II, making the total coursework load 12 credits. The research workload to produce the dissertation is 32 credits, assessed based on the student's ability to conduct comprehensive doctoral research from start to finish, with the following stages:

		<p>a. Research proposal and basic comprehensive skills, weighted 4 credits.</p> <p>b. Monitoring and evaluation of research progress conducted each semester, weighted 5 credits.</p> <p>c. Presentation of research results for the dissertation, weighted 4 credits.</p> <p>d. Dissertation manuscript approval, weighted 4 credits.</p> <p>e. Final dissertation examination in the form of a closed or open defense, weighted 15 credits.</p> <p>All courses are accompanied by course descriptions, syllabi, and Student Activity Plans (SAP) listed in the curriculum document.</p>															
	Curriculum: Research Track	<p>The curriculum for the Pharmaceutical Sciences doctoral program in the research track consists of 46 credits, divided into 6 credits of coursework and 40 credits of research to produce a dissertation. The research workload to produce the dissertation in the research track is 40 credits, assessed based on the student's ability to conduct comprehensive dissertation research from start to finish, with the following stages:</p> <p>Research Proposal and Basic Comprehensive Skills, weighted 4 credits.</p> <p>Research Progress Seminars held every semester with a total study weight of 7 credits, divided into 4 subdivisions, including:</p> <p>a. Dissertation Research Results Seminar I, weighted 1 credit.</p> <p>b. Dissertation Research Results Seminar II, weighted 2 credits.</p> <p>c. Dissertation Research Results Seminar III, weighted 2 credits.</p> <p>d. Dissertation Research Results Seminar IV, weighted 2 credits.</p> <p>Publication of Dissertation Research Results, weighted 6 credits.</p> <p>Presentation of Research Results for the dissertation, weighted 4 credits.</p> <p>Dissertation Manuscript Approval, weighted 4 credits.</p> <p>Closed Dissertation Examination, weighted 15 credits.</p>															
		<p><b>THE CURRICULUM DETAILS OF THE DOCTORAL PROGRAM IN PHARMACEUTICAL SCIENCES REGULAR TRACK 2022/2023</b></p> <p><b>1. COURSES (12 credits)</b></p> <p><b>Compulsory courses</b></p> <table border="1" data-bbox="555 1528 1429 1890"> <thead> <tr> <th>No.</th> <th>Field of Study</th> <th>Course Name</th> <th>Course code</th> <th>credits</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>General</td> <td>Research Methodology for PhD</td> <td>FAS3220101</td> <td>2</td> </tr> <tr> <td>2.</td> <td>General</td> <td>Scientific writing</td> <td>FAS3220102</td> <td>2</td> </tr> </tbody> </table>	No.	Field of Study	Course Name	Course code	credits	1.	General	Research Methodology for PhD	FAS3220101	2	2.	General	Scientific writing	FAS3220102	2
No.	Field of Study	Course Name	Course code	credits													
1.	General	Research Methodology for PhD	FAS3220101	2													
2.	General	Scientific writing	FAS3220102	2													

**Elective courses; Dissertation supporting courses**

No.	Field of Study	Course Name	Course code	credits
1	Pharmaceutics and Pharmaceutical Technology	Pharmaceutics and Pharmaceutical Technology I	FAS3220103	2
2	Pharmaceutics and Pharmaceutical Technology	Pharmaceutics and Pharmaceutical Technology II	FAS3220104	2
3	Pharmaceutical Biology	Pharmaceutical Biology	FAS3220105	2
4	Pharmaceutical Biology	Advanced Natural Product Pharmaceuticals	FAS3220106	2
5	Macromolecular Engineering	Pharmaceutical Bioinformatics	FAS3220107	2
6	Macromolecular Engineering	Methods in Molecular Biology	FAS3220108	2
7	Pharmaceutical Chemistry Analysis	Pharmaceutical Analysis	FAS3220109	2
8	Medicinal Chemistry	Structure Elucidation	FAS3220110	2
9	Medicinal Chemistry	Cheminformatics and Molecular Modeling	FAS3220111	2
10	Medicinal Chemistry	Organic Chemistry Synthesis and Green Chemistry	FAS3220112	2
11	Pharmacology and Toxicology	Pharmacology and Toxicology I	FAS3220113	2
12	Pharmacology and Toxicology	Pharmacology and Toxicology II	FAS3220114	2
13	Pharmacology and Toxicology	Experimental Pharmacology and Toxicology	FAS3220115	2
14	Clinical Pharmacy	Clinical Trial	FAS3220116	2
15	Clinical Pharmacy	Pharmacovigilance	FAS3220117	2



16	Clinical Pharmacy	Geriatric Care	FAS3220118	2
17	Clinical Pharmacy	Advanced Pharmacoeconomy	FAS3220119	2
18	Clinical Pharmacy	Intervention Model in Clinical Pharmacy	FAS3220120	2
19	Community Pharmacy	Community Pharmacy	FAS3220121	
20	Pharmaceutical Management	Pharmaceutical Management I	FAF8611	2
21	Pharmaceutical Management	Pharmaceutical Management II	FAF8621	2
22	According to Dissertation Topic	Other courses provided in other PhD program in or outside of UGM.	The course code and credits are adjusted to the applicable curriculum.	
23	According to Dissertation Topic	Capita Selecta in Pharmaceutical Science	FAS3220124	2

## 2. DISSERTATION (34 credits)

No.	Course Name	Course Code	Credits
1.	Research Proposal and Comprehensive Basic Skills	FAS3220201	4
2.	Dissertation Research Progress I	FAS3220202	1
3.	Dissertation Research Progress II	FAS3220301	2
4.	Dissertation Research Progress III	FAS3220401	2
5.	Dissertation Research Progress IV	FAS3220401	2
6.	Presentation of Dissertation Result	FAS3220502	4
7.	Dissertation Eligibility	FAS3220601	4
8.	Dissertation Examination	FAS3220602	15

**THE CURRICULUM DETAILS OF THE DOCTORAL PROGRAM IN PHARMACEUTICAL SCIENCES RESEARCH TRACK 2022/2023**

**COURSES (6 credits)****1. Compulsory courses**

No.	Field of Study	Course Name	Course code	Credits
1.	General	Research Methodology for PhD	FAS3220101	2
2.	General	Scientific writing	FAS3220102	2

**2. Elective courses**

No.	Field of Study	Course Name	Course code	Credits
1	According to Dissertation Topic	Other courses provided in regular track, and in other PhD program in or outside of UGM.	The course code and credits adjust to the applicable curriculum.	

**2. DISSERTATION (40 credits)**

No.	Course Name	Course Code	Credits
1.	Comprehensive Proposal and Basic Skills	FAS3220201	4
2.	Seminar of Dissertation Research Progress I	FAS3220203	1
3.	Seminar of Dissertation Research Progress II	FAS3220302	2
4.	Seminar of Dissertation Research Progress III	FAS3220402	2
5.	Seminar of Dissertation Research Progress IV	FAS3220503	2
6.	Publication of Dissertation Result	FAS3220504	6
7.	Result Presentation of Dissertation Research	FAS3220505	4
8.	Dissertation Eligibility	FAS3220603	4
9.	Dissertation Examination	FAS3220604	15

22. Curriculum Map :

PETA KURIKULUM PROGRAM STUDI DOKTOR ILMU FARMASI  
JALUR REGULER DAN JALUR PENELITIAN

Capaian Pembelajaran Program Studi ( <i>Program Learning Outcomes</i> ) Program Studi Doktor Ilmu Farmasi ( <i>Doctoral Program in Pharmaceutical Sciences</i> )														
MATA KULIAH ( <i>COURSES</i> )	CPL ( <i>PLO</i> )													
	1			2				3				4		
	1.1	1.2	2.1	2.2	2.3	2.4	2.5	2.6	3.1	3.2	3.3	3.4	4.1	4.2
<b>Mata kuliah wajib (<i>Compulsory courses</i>)</b>														
Metodologi Penelitian untuk Doktor <i>Research Methodology for PhD</i>							√	√						
Penulisan Ilmiah <i>Scientific writing</i>							√	√						
<b>Mata kuliah pilihan (<i>Elective courses</i>); mata kuliah pendukung Disertasi (<i>Dissertation support courses</i>)</b>														
Farmasetika dan Teknologi Farmasi I <i>Pharmaceutics and Pharmaceutical Technology I</i>				√	√	√								
Farmasetika dan Teknologi Farmasi II <i>Pharmaceutics and Pharmaceutical Technology II</i>				√	√	√								
Biologi Farmasi <i>Pharmaceutical Biology</i>				√	√	√								
Farmasi Bahan Alam Lanjut <i>Advanced Natural Product Pharmaceuticals</i>				√	√	√								
Bioinformatika Farmasi <i>Pharmaceutical Bioinformatics</i>				√	√	√								
Teknik Biologi Molekuler <i>Methods in Molecular Biology</i>				√	√	√								
Analisis Farmasi <i>Pharmaceutical Analysis</i>				√	√	√								
Elusidasi Struktur <i>Structure Elucidation</i>				√	√	√								
Kimia Informatika dan Pemodelan Molekuler <i>Cheminformatics and Molecular Modeling</i>				√	√	√								
Sintesis Senyawa Organik dan Kimia Hijau <i>Organic Chemistry Synthesis and Green Chemistry</i>				√	√	√								
Farmakologi dan Toksikologi I <i>Pharmacology and Toxicology I</i>				√	√	√								
Farmakologi dan Toksikologi II <i>Pharmacology and Toxicology II</i>				√	√	√								
Farmakologi dan Toksikologi Eksperimental <i>Experimental Pharmacology and Toxicology</i>				√	√	√								
Uji Klinik <i>Clinical Trial</i>	√			√	√	√								
Farmakovigilans <i>Pharmacovigilance</i>				√	√	√								
Pelayanan Geriatri <i>Geriatric Care</i>				√	√	√								
Farmakoekonomi Lanjut <i>Advanced Pharmacoeconomy</i>				√	√	√								
Model Intervensi Farmasi Klinik <i>Intervention Model in Clinical Pharmacy</i>	√			√	√	√								
Farmasi Komunitas <i>Community Pharmacy</i>	√			√	√	√								
Farmasi Manajemen I <i>Pharmaceutical Management I</i>	√			√	√	√				√				
Farmasi Manajemen II <i>Pharmaceutical Management II</i>	√			√	√	√			√		√	√		
Mata kuliah di Prodi Strata S3 lain di UGM atau di luar UGM. <i>Other courses provided in other PhD program in or outside of UGM</i>				√	√	√								
Kapita Selekta Ilmu Farmasi <i>Capita Selecta in Pharmaceutical Science</i>				√	√	√								
<b>Mata kuliah Disertasi (<i>Dissertation</i>)</b>														
Proposal Penelitian dan Kecakapan Komprehensif Dasar <i>Research Proposal and Comprehensive Basic Skills</i>				√				√	√					
Kemajuan Penelitian Disertasi I <i>Dissertation Research Progress I</i>													√	√
Kemajuan Penelitian Disertasi II <i>Dissertation Research Progress II</i>													√	√
Kemajuan Penelitian Disertasi III <i>Dissertation Research Progress III</i>													√	√
Kemajuan Penelitian Disertasi IV <i>Dissertation Research Progress IV</i>													√	√
Publikasi Hasil Penelitian Disertasi <i>Publication of Dissertation Result</i>	√	√											√	√
Pemaparan Hasil Penelitian Disertasi <i>Presentation of Dissertation Result</i>													√	√
Kelayakan Disertasi <i>Dissertation Eligibility</i>	√	√												
Ujian Disertasi <i>Dissertation Examination</i>										√	√	√	√	√

		:	
23.	Support for students in the learning process	:	<p>Laboratory:</p> <ol style="list-style-type: none"> <li>1. Phytochemistry and Pharmacognosy-Phytochemistry Laboratory</li> <li>2. Microbiology and Cell Biology Laboratory</li> <li>3. Pharmacy Management and Community Pharmacy Laboratory</li> <li>4. Physical Pharmacy Laboratory</li> <li>5. Pharmaceutical Technology Laboratory</li> <li>6. Medicinal Chemistry Laboratory</li> <li>7. Analytical Pharmaceutical Chemistry Laboratory</li> <li>8. Macromolecular Engineering Laboratory</li> <li>9. Pharmacology and Toxicology Laboratory</li> <li>10. Clinical Pharmacy and Pharmacotherapy Laboratory</li> </ol> <p>Discussion room and lecture room</p>
24.	Evaluation System Regular Track	:	<ol style="list-style-type: none"> <li>1. Midterm Exam</li> <li>2. Final Semester Exam</li> <li>3. Dissertation Examination: Comprehensive examination Monitoring and Evaluation Exam Eligibility Test Results Dissertation Results Presentation Seminar Dissertation Closed Examination</li> <li>4. Dissertation Open Examination</li> </ol>
	Evaluation System Research Track	:	<ol style="list-style-type: none"> <li>1. Midterm Exam</li> <li>2. Final Semester Exam</li> <li>3. Dissertation Examination: Comprehensive examination Dissertation Research Progress Seminar Publication of Dissertation Research Results Presentation of Dissertation Research Results Eligibility Test Results Dissertation Closed Examination</li> <li>4. Dissertation Open Examination</li> </ol>
25.	Candidate student selection system	:	Follow the selection system at <a href="http://um.ugm.ac.id">um.ugm.ac.id</a> , plus interview selection