

Doctor of IT Curriculum Structure

Students must complete 91 credits for graduation. The structure of this program is divided into three (3) levels:

Level 1:

Students are required to take seven (7) subjects or 21 credits for two (2) semesters. This includes two (2) university subjects and five (5) faculty subjects relevant to students' research. The subjects offered each semester will be decided by the faculty. The list of subjects are as in **Appendix A**. The following is the structure of the program for the first year.

Year 1 (Semester 1)

Code	Course Name	Classification	Credit
PPSW 6013	Research Methodology	University (Compulsory)	3
MITX XXXX	Faculty subject	Faculty (Elective)**	3
MITX XXXX	Elective 1	Specialization***	3
JUMLAH			9

Year 1 (Semester 2)

Code	Course Name	Classification	Credit
PPSW XXXX	University Subject	University (Elective)*	3
MITX XXXX	Faculty	Faculty (Elective)**	3
MITX XXXX	Elective 2	Specialization***	3
MITX XXXX	Elective 3	Specialization***	3
JUMLAH			12

* University elective subject (Choose one only)

** Faculty elective subject (Choose two only)

*** Specialization subject (Choose three only)

Level 2:

Candidates are required to prepare the research for one (1) semester that carries 14 credits. This level covers research preparation, including the preparation and presentation of the research proposal. The students will carry out the literature review, and plan for the research methodology.

Level 3 (P3):

Candidates are required to undertake research in the industry for two (2) years (4 semesters), which are equivalent to 56 credits (14 credits each semester). Candidates will conduct full-time research that focuses on the industry's problems. In the final semester, candidates will prepare for the dissertation and viva session. The following is the program structure for the Doctor of IT.

Table 1: Program structure

Level	Year 1		Year 2		Year 3		Year 4	
	Sem 1	Sem 2	Sem 1	Sem 2	Sem 1	Sem 2	Sem 1	Sem 2
L1: Coursework	9 credit	12 credit						
L2: Research Preparation			14 credit					
L3: Research				14 credit	14 credit	14 credit	14 credit	

Research Areas

The research areas in computing are as follows:

- Databases and data quality
- Software Engineering
- Immersive Technology and Wearable Computing
- Multimedia and Game Technology
- Information Security and Digital Forensics Research
- Geo-Information System and Database
- Bio Computing and Engineering
- Advanced Networking and Distributed Systems
- Other ICT topics

Appendix A: Subjects list

Compulsory (University)

Module	Code	Matapelajaran	Credit
Compulsory subject	PPSW 6013	<i>Research Methodology</i>	3
Elective (Choose ONE)	PPSW 6023	<i>Entrepreneurship</i>	3
	PPSW 6073	<i>Project management</i>	3
	PPSW 6053	<i>Quality system management</i>	3
	PPSW 6033	<i>Engineering & technology management</i>	3

Compulsory (Faculty)

Module	Code	Matapelajaran	Credit
Choose TWO	MITI 5613	<i>Theory Computation</i>	3
	MITP 5313	<i>Current Trend of Database Technology</i>	3
	MITS 5313	<i>Advanced Data communication & Networks</i>	3
	MITS 5113	<i>Computer Architecture & Compiler</i>	3
	MITP 5113	<i>Algorithm Analysis and Design</i>	3

Specilaization: Data and Knowledge engineering

Module	Code	Matapelajaran	Credit
Choose THREE	MITP 5423	<i>Advanced topics software intelligent</i>	3
	MITP 6413	<i>Geospatial Semantics</i>	3
	MITP 6323	<i>Industrial Data Management for Decision Support</i>	3
	MITP 6333	<i>Knowledge Management</i>	3
	MITP 5213	<i>Advanced Software Engineering</i>	3
	MITP 6343	<i>Special Topic on Data Warehousing And Data Mining</i>	3

Specialization: Networking

Module	Code	Matapelajaran	Credit
Choose THREE	MITS 5323	<i>Advanced Scalable Internetworking</i>	3

	MIT5 5333	<i>Advanced high performance network</i>	3
	MIT5 5343	<i>Advanced network design & diagnostic</i>	3
	MIT5 5213	<i>Distributed computing system</i>	3
	MIT5 5423	<i>Special topic (Computer Forensic)</i>	3

Specialization: Intelligent System and Soft Computing

Module	Code	Matapelajaran	Credit
Choose THREE	MITI 5123	<i>Advanced Artificial Intelligent</i>	3
	MITI 5133	<i>Advanced Soft Computing</i>	3
	MITI 5143	<i>Advanced Evolutionary Computing</i>	3
	MITI 5513	<i>Advanced Artificial Intelligent in manufacturing</i>	3
	MITI 5313	<i>Advanced Image processing and pattern recognition</i>	3
	MITI 5523	<i>Special Topic On Intelligent System And Soft Computing</i>	3

Specialization: Visualisation and Immersive Technology

Module	Code	Matapelajaran	Credit
Choose THREE	MITM 5233	<i>Computer Graphics and Visualizations</i>	3
	MITM 5323	<i>Mobile Application Development</i>	3
	MITM 5423	<i>Multimedia Information Retrieval</i>	3
	MITM 5313	<i>Special Topic on Advanced Human Computer Interaction</i>	3

Specialization: Computational Modelling

Module	Code	Matapelajaran	Credit
Choose THREE	MITI 6323	<i>Mathematical Modeling and Simulation</i>	3
	MITI 5223	<i>Computational Optimization</i>	3
	MITI 5213	<i>Advanced Numerical Methods</i>	3
	MITI 5533	<i>Special Topic in Computational Modelling</i>	3