

Digital Psychology

Introduction

In an era where humanity and technology are inextricably linked, a nuanced understanding of their interaction is paramount. This knowledge is critical not only for evaluating the impact of technology on human well-being but also for harnessing insights into human behavior to design and utilize technologies that foster greater individual and societal flourishing.

The Digital Psychology program at BINUS University is a unique double-degree collaboration that synergizes the strengths of two distinct disciplines to meet this critical need: Psychology and Computer Science. The Psychology program offers a robust foundation in the scientific knowledge of human behavior, extending traditional psychological principles to analyze the human-computer interface and leverage technology to improve human performance. Complemented by the Computer Science program's expertise in the processes, techniques, and tools for developing complex digital systems. By emphasizing specialties such as intelligent systems and software engineering, the program prepares students to create the technologies that are shaping our world.

By blending these two fields, the Digital Psychology program equips graduates with a dual skillset: the ability to understand the psychological intricacies of human interaction with technology, and the technical proficiency to design innovative, effective, and ethically sound digital solutions for well-being.

Vision

A World Class study program by providing excellent educational experiences in applied Psychology and ICT, fostering and empowering the society in serving and building the nation.

Mission

The mission of Digital Psychology Program is to contribute to the global community through the provision of world-class education by:

1. Educating students to effectively apply their educational experiences in Psychology and computer science to solve real-world problems.
2. Preparing our graduates to develop exemplary soft skills & technical skills required as Psychology and ICT professionals, leaders and entrepreneurs in global market.
3. Promoting high impact research that contributes to the nation.
4. Fostering BINUSIAN as lifelong learners through self-enrichment.
5. Empowering BINUSIAN to continuously improve society's quality of life.

Program Objective

The objectives of the program are:

1. Graduates will become a successful professional in psychology and IT fields
2. Graduates will obtain employment in global companies or become entrepreneurs.
3. Graduates will obtain professional certification or continue their study to the postgraduate level.
4. Graduate will have ability to pursue higher degree of education.

Student Outcomes

After completing the study, graduates are:

1. Able to use scientific reasoning based on an understanding of basic concepts and psychological theories, in order to describe and analyze psychological phenomena at the individual, group, organizational, and community levels.
2. Able to conduct critical scientific research, including developing psychological assessment instruments, to explain psychological phenomena using the latest information and communication technology (ICT)
3. Able to ethically conduct data-driven/data-driven psychological interventions for urban communities
4. Able to plan self and career development in preparation for the challenges of the global world
5. Able to analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solution
6. Able to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of computer science
7. Able to communicate effectively in a variety of professional contexts
8. Able to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles
9. Able to function effectively as a member or leader of a team engaged in activities appropriate to computer science
10. Able to apply computer science theory and software development fundamentals to produce computing-based solutions
11. Able to analyze significant trends, correlations, and patterns in psychological data by applying computational principles.

Prospective Career of the Graduates

After finishing their study, the graduates have an ideal foundation to enter many career opportunities, such as:

1. Behavioral data scientist
2. Cognitive/behavioral software or game developer
3. User Experience (UX)/Interaction (UI) designer/consultant
4. Professional in the area of Human Resources, Education, or Community
5. Assistant psychologist
6. Counselor
7. Writer/Content-creator/Influencer
8. Entrepreneur

Curriculum

The Digital Psychology program's curriculum is a unique blend of two distinct disciplines, structured to meet both national and international standards. It is built upon the foundational core curricula of both Psychology and Computer Science, aligning with the National Curriculum as well as the standards set by AP2TPI (Asosiasi Penyelenggara Pendidikan Tinggi Psikologi Indonesia) and ACM (Association for Computing Machinery), and integrating insights from various local and foreign universities and market trends.

This comprehensive academic foundation is complemented by a suite of applied courses developed collaboratively by the two departments. This practical focus is designed to equip graduates with the knowledge and skills necessary to play a direct and impactful role at both national and global levels, fostering improved human well-being in the digital era.

Course Structure

Sem	Code	Course Name	SCU	Total
1	COMP6421031	Algorithm and Programming ²	4/2	20
	COMP6839031	Program Design Methods ¹	2	
	MATH6129031	Linear Algebra	2	
	PSYC6221027	Basic Statistics ⁴	2	
	PSYC6222027	Scientific Logics ⁴	2	
	PSYC6223027	Fundamentals of Psychology ⁴	2	
	PSYC6224027	Psychology of Learning ⁴	2	
	PSYC6225027	Introduction to Digital Psychology ⁴	2	
	Foreign Language Courses		0	
2	CHAR6034031	Character Building: Pancasila	2	20
	PSYC6226027	Statistics for Behavioral Science ^{2&4}	2	
	COMP6458031	Data Structures ^{1&2}	4/2	
	COMP6848031	Object Oriented Programming ^{1&2}	2	
	PSYC6227027	Research Methodology: Quantitative Methods ^{2&4}	2	
	PSYC6228027	Observational Method ⁴	2	
	PSYC6229027	Biopsychology ⁴	2	
	LANG6097031	Indonesian	2	
	Foreign Language Courses		0	
3	COMP6847031	Database Technology ²	2/1	24
	COMP6468031	Artificial Intelligence ²	4	
	CPEN6249031	Computer Networks	2/1	
	MATH6128031	Discrete Mathematics	4	
	COMP6472031	Algorithm Design and Analysis ¹	4	
	PSYC6230027	Psychology of Human Development ^{2&4}	4	
	PSYC6231027	Cognitive Psychology ⁴	2	
	Foreign Language Courses		0	
4	SCIE6066031	Computational Biology	2/1	24
	MATH6135031	Calculus	4	
	MATH6192031	Scientifics Computing	2/1	
	CHAR6035031	Character Building: Kewarganegaraan	2	
	PSYC6122027	Social Psychology ^{1,2&4}	4	
	PSYC6232027	Principle of Psychodynamics & Humanistic on Personality ⁴	2	
	PSYC6137027	Psychometrics ⁴	2	
	COMP6466031	Software Engineering ²	4	

Sem	Code	Course Name	SCU	Total
	Foreign Language Courses		0	
5	COMP6470031	Compilation Techniques	4	24
	PSYC6233027	Research Methodology: Experimental Design ^{1,2&4}	2	
	PSYC6234027	Personality Psychology and Artificial Intelligence ⁴	2	
	PSYC6049027	Psychological Test Construction ⁴	4	
	PSYC6235027	Technology-Mediated Interview ⁴	4	
	PSYC6167027	Industrial and Organizational Psychology ⁴	4	
	COMP6716031	Operating Systems	2	
	ENPR6313032	Creativity and Innovation	2	
6 ³	SCIE6063001	Computational Physics	2/1	24
	PSYC6030027	Clinical Psychology ²	4	
	PSYC6140027	Counseling Psychology ²	2	
	PSYC6236027	Digital Well-Being	4	
	PSYC6237027	Behavioral Data Analytics	4/2	
	COMP6800001	Human and Computer Interaction ²	2/1	
	CHAR6015027	Character Building: Agama	2	
7 ³	ENPR6312005	Venture Creation	2	22
	PSYC6238027	Technology-Based Psychological Intervention	4	
	COSC6166027	Behavioural Simulation and Generation ¹	2/2	
	PSYC6239027	Digital Workforce Psychology	2	
	PSYC6240027	Digital School Psychology	2	
	PSYC6241027	Affective Computing	4	
	PSYC6242027	Introduction to Psychodiagnostic	4	
8	COSC6167031	Pre-Thesis	2	22
	Enrichment Program I		20	
9	COSC6168031	Thesis	4	24
	Enrichment Program II		20	
Total Credits 204 SCU				

1) This course is delivered in English

2) Global Learning System course

3) In 6th and 7th Semester, conducted for student mobility to BINUS @Greater Jakarta

Foreign Language Courses:

Students will take foreign language courses according to Beelingua Placement Test results. See foreign language courses appendix for the details. Students must pass with a minimum Grade of C.

Enrichment Program I (8th Semester) & Enrichment Program II (9th Semester):

Student will take one of enrichment program tracks (off campus). See enrichment appendix for the tracks detail.

Appendix Foreign Language Courses

Foreign Language Courses		SCU
ENGL6270031	English for Frontrunners	0
ENGL6271031	English for Independent Users	0
ENGL6272031	English for Professionals	0
JAPN6209031	Basic Japanese Language*	0
CHIN6192031	Basic Chinese Language*	0

*) This course is optional for students

1. Students with Beelingua Placement Test score less than 60 are required to take English for Frontrunners and English for Independent Users.
2. Students with Beelingua Placement Test score between 60 and 99 are required to take English for Independent Users and English for Professionals.
3. Students with Beelingua Placement Test score greater than 99 are required to take English for Professionals. Additionally, students may choose to take either Basic Japanese Language or Basic Chinese Language.
4. Students are required to pass the foreign language courses before they take enrichment.
5. Students can see the requirements to pass the foreign language courses at BINUSMAYA – Beelingua

Enrichment Track Scheme

Scheme	Semester 8							Semester 9						
	IN	RS	EN	CD	SA	IS	etc	IN	RS	EN	CD	SA	IS	etc
1	v							v						
2		v							v					
3			v							v				
4				v				v						
5				v					v					
6				v							v			
7				v									v	
8					v			v						
9					v				v					
10					v						v			
11					v								v	
12						v		v						
13						v			v					
14						v					v			
15							v	v						
16							v		v					
17							v				v			
18							v						v	

Note:

IN	: <i>Company Internship</i>	SA	: <i>Study Abroad</i>
RS	: <i>Research Fellowship</i>	IS	: <i>Specific Independent Study</i>
EN	: <i>Entrepreneurship</i>		
CD	: <i>Community Impact Internship</i>		

Description:

Student will take one of enrichment program tracks

Company Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
COSC6190031	Industrial Experience in Digital Psychology	8	
COSC6191031	Project Planning and Designing	8	
COSC6192031	Employability and Entrepreneurial Skill: Teamwork, Communication, Planning & Organizing	4	
Enrichment Program II			
COSC6193031	Professional Experience in Digital Psychology	8	
COSC6194031	Project Development and Implementation	8	
COSC6195031	Employability and Entrepreneurial Skill: Self- Management, Initiative & Enterprise, Problem Solving & Decision Making	4	

Research Fellowship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
RSRC6015031	Research Experience	8	
RSRC6016031	Writing Research Proposal	8	
RSRC6017031	Global EES: Teamwork, Communication, Planning & Organizing	4	
Enrichment Program II			
RSRC6018031	Research Assistantship	8	
RSRC6019031	Scientific Report Writing	8	
RSRC6020031	Global EES: Self-Management, Initiative & Enterprise, Problem Solving & Decision Making	4	

Entrepreneurship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
ENPR6402031	Business Start Up	8	
ENPR6403031	Product Development Process	8	

Code	Course Name	SCU	Total
ENPR6404031	Employability and Entrepreneurial Skill in New Business	4	
Enrichment Program II			
ENPR6405031	Growing a Business	8	
ENPR6406031	Business Development Process	8	
ENPR6407031	Employability and Entrepreneurial Skill in Business Experience	4	

Community Impact Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
CMDV6746031	Community Outreach Project Implementation	8	
CMDV6747031	Community Outreach Project Design	8	
CMDV6748031	Employability and Entrepreneurial Skill in Community Outreach	4	
Enrichment Program II			
CMDV6749031	Community Development Project Implementation	8	
CMDV6750031	Community Development Project Design	8	
CMDV6751031	Employability and Entrepreneurial Skill in Community Development	4	

Study Abroad Track

Code	Course Name	SCU	Total
Elective courses list for study abroad*			20
Enrichment Program I			
GLOB6208031	Elective Course for Study Abroad 1	4	
GLOB6209031	Elective Course for Study Abroad 2	4	
GLOB6210031	Elective Course for Study Abroad 3	4	
GLOB6211031	Elective Course for Study Abroad 4	4	
GLOB6268031	Elective Course for Study Abroad 25	2	
GLOB6212031	Elective Course for Study Abroad 5	2	
GLOB6213031	Elective Course for Study Abroad 6	2	
GLOB6214031	Elective Course for Study Abroad 7	2	
GLOB6215031	Elective Course for Study Abroad 8	2	
GLOB6216031	Elective Course for Study Abroad 9	2	
GLOB6217031	Elective Course for Study Abroad 10	2	
GLOB6218031	Elective Course for Study Abroad 11	2	
GLOB6219031	Elective Course for Study Abroad 12	3	
GLOB6269031	Elective Course for Study Abroad 26	1	

*) Transferred courses will be transferred based on credit transfer policies on study program with total of 20 credits.

Specific Independent Study

Code	Course Name	SCU	Total
For students who take Specific Independent Study Track in either odd or even semester, they should take these courses:			20
Enrichment Program I/II			
CSIS6234031	Course Certification	3	
CSIS6235031	Technical Skill Enrichment	4	
CSIS6236031	Industrial Project	9	
CSIS6237031	Soft Skill Enrichment	4	
CSIS6238031	Elective Course for Specific Independent Study 1	8	
CSIS6239031	Elective Course for Specific Independent Study 2	8	
CSIS6240031	Elective Course for Specific Independent Study 3	6	
CSIS6241031	Elective Course for Specific Independent Study 4	6	
CSIS6242031	Elective Course for Specific Independent Study 5	6	
CSIS6243031	Elective Course for Specific Independent Study 6	5	
CSIS6244031	Elective Course for Specific Independent Study 7	5	
CSIS6245031	Elective Course for Specific Independent Study 8	5	
CSIS6246031	Elective Course for Specific Independent Study 9	5	
CSIS6247031	Elective Course for Specific Independent Study 10	4	
CSIS6248031	Elective Course for Specific Independent Study 11	4	
CSIS6249031	Elective Course for Specific Independent Study 12	4	
CSIS6250031	Elective Course for Specific Independent Study 13	4	
CSIS6251031	Elective Course for Specific Independent Study 14	4	
CSIS6252031	Elective Course for Specific Independent Study 15	3	
CSIS6253031	Elective Course for Specific Independent Study 16	3	
CSIS6254031	Elective Course for Specific Independent Study 17	3	
CSIS6255031	Elective Course for Specific Independent Study 18	3	
CSIS6256031	Elective Course for Specific Independent Study 19	3	
CSIS6257031	Elective Course for Specific Independent Study 20	3	
CSIS6258031	Elective Course for Specific Independent Study 21	2	
CSIS6259031	Elective Course for Specific Independent Study 22	2	
CSIS6260031	Elective Course for Specific Independent Study 23	2	
CSIS6261031	Elective Course for Specific Independent Study 24	2	
CSIS6262031	Elective Course for Specific Independent Study 25	2	
CSIS6263031	Elective Course for Specific Independent Study 26	2	
CSIS6264031	Elective Course for Specific Independent Study 27	2	
CSIS6265031	Elective Course for Specific Independent Study 28	2	
CSIS6266031	Elective Course for Specific Independent Study 29	1	
CSIS6267031	Elective Course for Specific Independent Study 30	1	
CSIS6268031	Elective Course for Specific Independent Study 31	1	
CSIS6269031	Elective Course for Specific Independent Study 32	1	

*) For students who take BINUS certified specific independent study courses, they should take the first 4 courses on the list above (20 credits). Meanwhile, electives courses 1 to 32 are transferred courses for students who take

certified specific independent study outside BINUS University. Transferred courses will be transferred based on credit transfer policies on study program with total of 20 credits.

The Table of Prerequisite for Psychology Study Program

There is no list of courses prerequisites in this curriculum

Student should pass all of these quality controlled courses as listed below:

No	Course Code	Course Name	Minimal Passing Grade	Semester
1	CHAR6013027	Character Building: Pancasila	C	1
2	COMP6421031	Algorithm and Programming*	C	1
3	COMP6839031	Program Design Methods*	C	1
4	PSYC6224027	Psychology of Learning	B	2
5	COMP6458031	Data Structures*	C	2
6	PSYC6227027	Research Methodology: Quantitative Methods*	C	2
7	COMP6847031	Database Technology	C	3
8	PSYC6231027	Cognitive Psychology	C	3
9	COMP6466031	Software Engineering*	C	4
10	COMP6716031	Operating System	C	5
11	PSYC6233027	Research Methodology: Experimental Design	C	5
12	PSYC6049027	Psychological Test Construction*	C	5
13	PSYC6238027	Technology-Based Psychological Intervention*	C	7
14	ENPR6312005	Venture Creation	C	7

*) Tutorial