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	COMP6047001	Algorithm and Programming[2]	4/2	20
	COMP6798001	Program Design Methods[1]	2	
	MATH6030001	Linear Algebra	2	
	PSYC6221027	Basic Statistics	2	
	PSYC6222027	Scientific Logics	2	
	PSYC6223027	Fundamentals of Psychology	2	
	PSYC6224027	Psychology of Learning	2	
	PSYC6225027	Introduction to Digital Psychology	2	
	Foreign Language Courses		0	
2	CHAR6013027	Character Building: Pancasila	2	20
	PSYC6226027	Statistics for Behavioral Science[2]	2	
	COMP6048001	Data Structures[1&2]	4/2	
	COMP6820001	Object Oriented Programming[1&2]	2	
	PSYC6227027	Research Methodology: Quantitative Methods[2]	2	
	PSYC6228027	Observational Method	2	
	PSYC6229027	Biopsychology	2	
	LANG6027027	Indonesian	2	
	Foreign Language Courses		0	
3	COMP6799001	Database Technology[2]	2/1	24
	COMP6065001	Artificial Intelligence[2]	4	
	CPEN6247001	Computer Networks	2/1	
	MATH6025001	Discrete Mathematics	4	
	COMP6049001	Algorithm Design and Analysis[1]	4	
	PSYC6230027	Psychology of Human Development[2]	4	
	PSYC6231027	Cognitive Psychology	2	
	Foreign Language Courses		0	
4	SCIE6062001	Computational Biology	2/1	24
	MATH6031001	Calculus	4	
	MATH6183001	Scientifics Computing	2/1	
	CHAR6014027	Character Building: Kewarganegaraan	2	
	PSYC6122027	Social Psychology[1&2]	4	
	PSYC6232027	Principle of Psychodynamics & Humanistic on Personality	2	
	PSYC6137027	Psychometrics	2	
	COMP6100001	Software Engineering[2]	4	
	Foreign Language Courses		0	

Sem	Code	Course Name	SCU	Total
5	COMP6062001	Compilation Techniques	4	24
	PSYC6233027	Research Methodology: Experimental Design[1&2]	2	
	PSYC6234027	Personality Psychology and Artificial Intelligence	2	
	PSYC6049027	Psychological Test Construction	4	
	PSYC6235027	Technology-Mediated Interview	4	
	PSYC6167027	Industrial and Organizational Psychology	4	
	COMP6697001	Operating Systems	2	
	ENPR6311005	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	PSYC6243027	Pre-Thesis	2	22
	Enrichment Program I		20	
9	PSYC6244027	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

Appendix Foreign Language Courses

Foreign language courses are personalized courses that can be taken by the students according to their own pace from semester 1 until semester 4 or before they take enrichment. The courses are available at BINUSMAYA – Beelingua. 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
ENGL6253027	English for Frontrunners	0
ENGL6254027	English for Independent Users	0
ENGL6255027	English for Professionals	0
JAPN6190027	Basic Japanese Language*	0
CHIN6163027	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	: Company Internship	SA	: Study Abroad
RS	: Research Fellowship	IS	: Specific Independent Study
EN	: Entrepreneurship	FS	: Fast Track
CD	: Community Impact Internship	etc	: Study Program Special Purposes

Description:

Student will take one of enrichment program tracks

Company Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
PSYC6246027	Industrial Experience in Digital Psychology	8	
PSYC6247027	Project Planning and Designing	8	
PSYC6248027	Employability and Entrepreneurial Skill: Teamwork, Communication, Planning & Organizing	4	
Enrichment Program II			
PSYC6249027	Professional Experience in Digital Psychology	8	
PSYC6250027	Project Development and Implementation	8	
PSYC6251027	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
RSRC6002027	Research Experience	8	
RSRC6003027	Writing Research Proposal	8	
RSRC6004027	Global EES: Teamwork, Communication, Planning & Organizing	4	
Enrichment Program II			
RSRC6009027	Research Assistantship	8	
RSRC6010027	Scientific Report Writing	8	
RSRC6011027	Global EES: Self-Management, Initiative & Enterprise, Problem Solving & Decision Making	4	

Entrepreneurship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
ENPR6371027	Business Start Up	8	
ENPR6372027	Product Development Process	8	
ENPR6373027	Employability and Entrepreneurial Skill in New Business	4	
Enrichment Program II			
ENPR6390027	Growing a Business	8	
ENPR6391027	Business Development Process	8	
ENPR6392027	Employability and Entrepreneurial Skill in Business Experience	4	

Community Impact Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
CMDV6728027	Community Outreach Project Implementation	8	
CMDV6729027	Community Outreach Project Design	8	
CMDV6730027	Employability and Entrepreneurial Skill in Community Outreach	4	
Enrichment Program II			
CMDV6734027	Community Development Project Implementation	8	
CMDV6735027	Community Development Project Design	8	
CMDV6736027	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			
GLOB6005027	Elective Course for Study Abroad 1	4	
GLOB6006027	Elective Course for Study Abroad 2	4	
GLOB6007027	Elective Course for Study Abroad 3	4	
GLOB6008027	Elective Course for Study Abroad 4	4	
GLOB6009027	Elective Course for Study Abroad 5	2	
GLOB6010027	Elective Course for Study Abroad 6	2	
GLOB6011027	Elective Course for Study Abroad 7	2	
GLOB6012027	Elective Course for Study Abroad 8	2	
GLOB6013027	Elective Course for Study Abroad 9	2	
GLOB6014027	Elective Course for Study Abroad 10	2	
GLOB6015027	Elective Course for Study Abroad 11	2	
GLOB6016027	Elective Course for Study Abroad 12	2	

Code	Course Name	SCU	Total
GLOB6041027	Elective Course for Study Abroad 25	3	
GLOB6042027	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:			
Enrichment Program I/II			
CSIS6001027	Course Certification	3	
CSIS6002027	Technical Skill Enrichment	4	
CSIS6003027	Industrial Project	9	
CSIS6004027	Soft Skill Enrichment	4	
CSIS6005027	Elective Course for Specific Independent Study 1	8	
CSIS6006027	Elective Course for Specific Independent Study 2	8	
CSIS6007027	Elective Course for Specific Independent Study 3	6	
CSIS6008027	Elective Course for Specific Independent Study 4	6	
CSIS6009027	Elective Course for Specific Independent Study 5	6	
CSIS6010027	Elective Course for Specific Independent Study 6	5	
CSIS6011027	Elective Course for Specific Independent Study 7	5	
CSIS6012027	Elective Course for Specific Independent Study 8	5	
CSIS6013027	Elective Course for Specific Independent Study 9	5	
CSIS6014027	Elective Course for Specific Independent Study 10	4	
CSIS6015027	Elective Course for Specific Independent Study 11	4	20
CSIS6016027	Elective Course for Specific Independent Study 12	4	
CSIS6017027	Elective Course for Specific Independent Study 13	4	
CSIS6018027	Elective Course for Specific Independent Study 14	4	
CSIS6019027	Elective Course for Specific Independent Study 15	3	
CSIS6020027	Elective Course for Specific Independent Study 16	3	
CSIS6021027	Elective Course for Specific Independent Study 17	3	
CSIS6022027	Elective Course for Specific Independent Study 18	3	
CSIS6023027	Elective Course for Specific Independent Study 19	3	
CSIS6024027	Elective Course for Specific Independent Study 20	3	
CSIS6025027	Elective Course for Specific Independent Study 21	2	
CSIS6026027	Elective Course for Specific Independent Study 22	2	
CSIS6027027	Elective Course for Specific Independent Study 23	2	
CSIS6028027	Elective Course for Specific Independent Study 24	2	
CSIS6029027	Elective Course for Specific Independent Study 25	2	
CSIS6030027	Elective Course for Specific Independent Study 26	2	
CSIS6031027	Elective Course for Specific Independent Study 27	2	
CSIS6032027	Elective Course for Specific Independent Study 28	2	

Code	Course Name	SCU	Total
CSIS6033027	Elective Course for Specific Independent Study 29	1	
CSIS6034027	Elective Course for Specific Independent Study 30	1	
CSIS6035027	Elective Course for Specific Independent Study 31	1	
CSIS6036027	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	COMP6047001	Algorithm and Programming*	C	1
2	COMP6798001	Program Design Methods*	C	1
3	PSYC6224027	Psychology of Learning	C	1
4	CHAR6013027	Character Building: Pancasila	B	2
5	COMP6048001	Data Structures*	C	2
6	PSYC6227027	Research Methodology: Quantitative Methods*	C	2
7	COMP6799001	Database Technology	C	3
8	PSYC6231027	Cognitive Psychology	C	3
9	COMP6100001	Software Engineering*	C	4
10	COMP6697001	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