Business Analytics

Introduction

The Bachelor in Business Analytics program is aimed at analytical driven individuals who possess strong critical thinking abilities and wish to harness the power of data to transform the world. This revolutionary degree, designed with the expertise of the School of Information Systems to prepare the next generation of global pioneers who can collect, manage and analyze data to solve the most pressing challenges of businesses and institutions. Through an applied learning methodology and a hands-on approach, students learn to manage the most innovative technologies and tools to exploit the true power of data to create value for companies and societies. This bachelor is aimed at individuals who are ready to drive performance within businesses, make the smartest management decisions and make a positive impact in the corporate world.

Vision

A world class study program that excels in providing high-level Information system education is specialized in business-IT, recognized internationally, and champions innovation.

Mission

The missions of Business Analytics are:

1. Nurturing students and lecturers with creative and value-adding talents in Information System by creating a suitable environment;
2. Educating students in information systems, covering knowledge and skills in analyzing, designing and implementing information systems for improving business processes and to be able to create an innovative and valuable information system solution, through intensive learning process, research activities and collaboration with global industries;
3. Providing integrated knowledge to pursue further studies and create outstanding professionals, entrepreneurs, and leaders for a global community;
4. Providing professional services in Information System with an emphasis on the application of knowledge to society;
5. Fostering the quality of life of Indonesians and the international community through leveraging Information system solutions.

Program Objective

The objectives of the program are to:

1. Equip students with the expertise and solid basic knowledge about system development that will be needed as a professional in the field of information systems, as well as increasing the skills and knowledge of educators in the information systems field;
2. Prepare students with proficiency and in-depth knowledge of innovative information systems related to IT-Business Innovation;
3. Equip students with the ability to use knowledge of applied business applications for specific industrial purposes;
4. Equip the community with expertise and knowledge through the use of information system solutions;
5. Provide education to the public regarding the use and application of information systems.

Student Outcomes

After completing the study, graduates are:

1. Able to analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solution;
2. Able to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline;
3. Able to communicate effectively in a variety of professional contexts;
4. Able to recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles;
5. Able to function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline;
6. Able to support the delivery, use, and management of information systems within an information systems environment;

Prospective Career of the Graduates

Graduates will have the necessary skills to work as:

1. Data Business Analyst
2. Data Analytics Consultant
3. Decision Science Consultant
4. Executive Data Management
5. Data Analytics Quality Executive
6. Customer Analytics
7. Quantitative Analyts/Modeler
8. Data Architect
9. Machine Learning Engineer
10. Chief Data Officer
11. Application Architect
12. Market Research Analyst
13. Business/Analytics Translator
14. Web Analytics
15. Social Media Data Analyst
16. Supply Chain Analytics
17. Human Resource Analytics
18. Marketing Analytics
19. Risk Analytics

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Curriculum

The Business Analytics curriculum is designed by referring to the curriculum recommended by Association for Computing Machinery (ACM) and Association for Information Systems (AIS) for model curriculum and guidelines for undergraduate degree programs in Business Analytics area. In addition, the curriculum has been influenced by foreign universities with the reputation of qualified Business Analytics Programs. The students will learn how to use their data analysis skills to solve business problems, applying them to specific areas in marketing, finance, and economics. In addition, they will learn by using tools that are being used by global industry to get insight through analytics. This programme enables students to attain strong knowledge of data analytics foundations and fundamentals, including: familiarity with data analytics and programming principles, and high and broad understanding of the application of analytics in various industrial domains. The student will have the ability to function effectively in teams to accomplish a common goal and the understanding of professional, ethical, legal, security, and social issues and responsibilities of analytics professionals. They will have the capabilities to analyse the local and global impact of data analytics on individuals, organisations and society.

Course Structure

Sem	Code	Course Name	SCU	Total
1	CHAR6013003	Character Building: Pancasila	2	20
	ACCT6425003	Introduction to Financial Accounting	2	
	ISYS6186003	Business Process Fundamental** **(AOL)**	4	
	ISYS6093003	Information System Concept*&**	4	
	COMP6178003	Introduction to Programming	2/2	
	ISYS6675003	Information Technology Infrastructure	2	
	LANG6027003	Indonesian	2	
	Foreign Language Courses		0	
2	CHAR6014003	Character Building: Kewarganegaraan	2	20
	ISYS6123003	Introduction to Database Systems*&** **(AOL)**	2/2	
	ISYS6126003	Enterprise System*&** **(AOL)**	4	
	ISYS6338003	Testing and System Implementation*&** **(AOL)**	2	
	ENTR6509001	Entrepreneurship: Ideation	2	
	ISYS6596003	User Experience Research and Design** **(AOL)**	4/2	
	Foreign Language Courses		0	
3	CHAR6015003	Character Building: Agama	2	21
	ISYS6677003	Information Systems Analysis and Design**&*** **(AOL)**	5/2	
	ISYS6197003	Business Application Development **(AOL)**	2/2	
	ISYS6256003	Information Systems Project Management*&** **(AOL)**	4	
	ISYS6198003	Data and Information Management** **(AOL)**	4	
	Foreign Language Courses		0	
4	ISYS6676003	Advanced Information System Analysis and Design**&*** **(AOL)**	5/2	21
	ISYS6478003	Research Methods in Information Systems	2	
	ISYS6674003	Knowledge Management**	2	
	ISYS6620003	Business Analytics**	4/2	
	ISYS6621003	Business Intelligence and Data Warehousing	2	
	ISYS6622003	Social Media Analytics and Data Driven Innovation*	2	
	Foreign Language Courses		0	
5	ENTR6511001	Entrepreneurship: Market Validation	2	18
	ISYS6538003	Advanced in Business Application Development** **(AOL)**	4/2	
	ISYS6623003	Predictive Analytics	2/2	
	ISYS6679003	Decision Analytics	2/2	
	ISYS6624003	Information Security, Governance and the Cloud*&**	2	
6	**Enrichment Program I**		20	20
7	**Enrichment Program II**		20	20
8	ISYS6625003	Pre-Thesis	2	6
	ISYS6626003	Thesis	4	
	ISYS6117003	Thesis	6	
				Total Credits 146 SCU

**) This course is delivered in English*
***) Global Learning System Course*

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****) Entrepreneurship Embedded*

-) **(AOL)** *- Assurance of Learning Process System*

Pre-thesis (2 SCU) & Thesis (4 SCU) *can be taken in the 6th and/or 7th semester by the students who meet the requirements from the Study Program/Program.*

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.

The following are the provisions of the courses that must be taken by students:

Foreign Language Courses		SCU
ENGL6253003	English for Frontrunners	0
ENGL6254003	English for Independent Users	0
ENGL6255003	English for Professionals	0
JAPN6190003	Basic Japanese Language*	0
CHIN6163003	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 61-99 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.*

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Enrichment Track Scheme

Track	Semester 6							Semester 7							
	IN	RS	EN	CD	SA	IS	etc	IN	RS	EN	CD	SA	IS	FS	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					
19			v							v					

Track	Semester 6							Semester 7							
	IN	RS	EN	CD	SA	IS	etc	IN	RS	EN	CD	SA	IS	FS	etc
20				v						v					
21					v					v					
22						v				v					
23				v				v							
24				v					v						
25				v							v				
26				v									v		
27				v										v	
28					v			v							
29					v				v						
30					v						v				
31					v								v		
32					v									v	
33						v		v							
34						v			v						
35						v					v				
36						v								v	

Note:

IN : Company Internship
RS : Research Fellowship
EN : Entrepreneurship
CD : Community Impact Internship
SA : Study Abroad
IS : Specific Independent Study
FS : Fast Track
etc : Study Program Special Purposes

Description:

Student will take one of enrichment program tracks

Students who failed in Enrichment Program I can retake with the same track or change into another track. As for Enrichment Program II, student who failed with Certified Internship, Certified Research, Certified Community Development, and Certified Study Abroad track on Enrichment Program II, can retake with the same track or change into another track. However students who take **Certified Entrepreneurship** track on Enrichment Program II, should **retake with another track.**

Company Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
ISYS6215003	Experience in Industry	8	
ISYS6844003	Requirement and Solution for Information Systems	8	
COMM6703003	Business & Professional Communication	4	
Enrichment Program II			20
ISYS6347003	Professional Program in Industry	8	
ISYS6845003	Design and Evaluation for Information Systems	8	
BUSS6249003	Business Ethic and Social Responsibility	4	

Entrepreneurship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
ENTR6949003	New Venture Initiation in Information Systems	8	
ENTR6596003	Product Development Process for Information Technology Business	8	
ENTR6950003	EES in New Information Systems Business I	4	
Enrichment Program II			20
ENTR6951003	Product Launching in Information Systems	8	
ENTR6597003	Business Development for Information Technology Business	8	
ENTR6952003	EES in New Information Systems Business II	4	

Research Fellowship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
RSCH6275003	Research Experience	8	
RSCH6510003	Scientific Writing in Information Systems Research	8	
RSCH6460003	EES in Information Systems Research	4	
Enrichment Program II			20
RSCH6412003	Information Systems Research Experience	8	
RSCH6511003	Scientific Writing in Information Systems	8	
RSCH6414003	Global Employability and Entrepreneurial Skills in Information Systems Research	4	

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Community Impact Internship Track

Code	Course Name	SCU	Total
Enrichment Program I			20
CMDV6156003	Community Outreach Project Implementation	8	
CMDV6289003	Community Outreach Project Design in Information Systems	8	
CMDV6259003	Employability and Entrepreneurial Skills in Information Systems Community	4	
Enrichment Program II			20
CMDV6260003	Community Development Project Implementation	8	
CMDV6290003	Community Development Project Design in Information Systems	8	
CMDV6262003	Employability and Entrepreneurial Skills in Information Systems Community Development	4	

Study Abroad Track

Code	Course Name	SCU	Total
Elective courses list for study abroad*			20
Enrichment Program I/II			
GLOB6005003	Elective Course for Study Abroad 1	4	
GLOB6006003	Elective Course for Study Abroad 2	4	

Code	Course Name	SCU	Total
GLOB6007003	Elective Course for Study Abroad 3	4	
GLOB6008003	Elective Course for Study Abroad 4	4	
GLOB6009003	Elective Course for Study Abroad 5	2	
GLOB6010003	Elective Course for Study Abroad 6	2	
GLOB6011003	Elective Course for Study Abroad 7	2	
GLOB6012003	Elective Course for Study Abroad 8	2	
GLOB6013003	Elective Course for Study Abroad 9	2	
GLOB6014003	Elective Course for Study Abroad 10	2	
GLOB6015003	Elective Course for Study Abroad 11	2	
GLOB6016003	Elective Course for Study Abroad 12	2	
GLOB6251003	Elective Course for Study Abroad 29	4	

*) 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
Elective courses list for certified specific independent study*			
CSIS6001003	Course Certification	3	
CSIS6002003	Technical Skill Enrichment	4	
CSIS6003003	Industrial Project	9	
CSIS6004003	Soft Skill Enrichment	4	
CSIS6005003	Elective Course for Specific Independent Study 1	8	
CSIS6006003	Elective Course for Specific Independent Study 2	8	
CSIS6007003	Elective Course for Specific Independent Study 3	6	
CSIS6008003	Elective Course for Specific Independent Study 4	6	
CSIS6009003	Elective Course for Specific Independent Study 5	6	
CSIS6010003	Elective Course for Specific Independent Study 6	5	
CSIS6011003	Elective Course for Specific Independent Study 7	5	
CSIS6012003	Elective Course for Specific Independent Study 8	5	
CSIS6013003	Elective Course for Specific Independent Study 9	5	20
CSIS6014003	Elective Course for Specific Independent Study 10	4	
CSIS6015003	Elective Course for Specific Independent Study 11	4	
CSIS6016003	Elective Course for Specific Independent Study 12	4	
CSIS6017003	Elective Course for Specific Independent Study 13	4	
CSIS6018003	Elective Course for Specific Independent Study 14	4	
CSIS6019003	Elective Course for Specific Independent Study 15	3	
CSIS6020003	Elective Course for Specific Independent Study 16	3	
CSIS6021003	Elective Course for Specific Independent Study 17	3	
CSIS6022003	Elective Course for Specific Independent Study 18	3	
CSIS6023003	Elective Course for Specific Independent Study 19	3	
CSIS6024003	Elective Course for Specific Independent Study 20	3	
CSIS6025003	Elective Course for Specific Independent Study 21	2	
CSIS6026003	Elective Course for Specific Independent Study 22	2	

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Code	Course Name	SCU	Total
CSIS6027003	Elective Course for Specific Independent Study 23	2	
CSIS6028003	Elective Course for Specific Independent Study 24	2	
CSIS6029003	Elective Course for Specific Independent Study 25	2	
CSIS6030003	Elective Course for Specific Independent Study 26	2	
CSIS6031003	Elective Course for Specific Independent Study 27	2	
CSIS6032003	Elective Course for Specific Independent Study 28	2	
CSIS6033003	Elective Course for Specific Independent Study 29	1	
CSIS6034003	Elective Course for Specific Independent Study 30	1	
CSIS6035003	Elective Course for Specific Independent Study 31	1	
CSIS6036003	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.*

Fast Track

Code	Course Name	SCU	Total
Enrichment Program II (Master of Management Information Systems: Information Systems Strategic Management Stream)			20
ISYS6829003	Digital Technology and Transformation	4	
ISYS6830003	Data Analytics for Business	6	
ISYS6831003	Applied Technology in Information Systems*	4	
ISYS6849003	Strategic Planning for Information Systems	6	
Enrichment Program II (Master of Management Information Systems: Digitalpreneurship Stream)			
ISYS6829003	Digital Technology and Transformation	4	
ISYS6830003	Data Analytics for Business	6	
ISYS6831003	Applied Technology in Information Systems*	4	
ISYS6848003	New Media Ventures and Innovation	6	

**) Students are required to obtain certification no later than the end of the first semester of the master's (S2) program, as outlined in the university's official guidelines. This certification will be transferred as an undergraduate (S1) course and reported in the seventh semester of the undergraduate program.*

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

No	Course Code	Course Name	Minimal Grade
1.	CHAR6013003	Character Building: *Pancasila*	B
2.	ENTR6511001	Entrepreneurship: Market Validation	C
3.	ISYS6186003	Business Process Fundamental	C
4.	ISYS6123003	Introduction to Database Systems	C
5.	ISYS6126003	Enterprise System*	C
6.	ISYS6677003	Information Systems Analysis and Design*	C
7.	ISYS6198003	Data and Information Management*	C
8.	ISYS6256003	Information Systems Project Management	C

*) Tutorial & Multipaper